

**GRASSROOTS GOVERNANCE: THE ROLE OF
AGRICULTURE SERVICE CENTERS IN SERVICE
DELIVERY IN NEPAL**

**THESIS SUBMITTED TO TRIBHUVAN UNIVERSITY
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY IN PUBLIC ADMINISTRATION**

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DECLARATION

I hereby declare that this study entitled “**Grassroots Governance: The Role of Agriculture Service Centers in Service Delivery in Nepal**” is my own original work. The findings of this study have not been submitted anywhere for the award of any Degree and the sources of information have been acknowledged for the authenticity of the research.

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RECOMMENDATION OF THE SUPERVISORS

This is to certify that this thesis entitled “**Grassroots Governance: The Role of Agriculture Service Centers in Service Delivery in Nepal**” submitted by Mr. Laxmi Kanta Paudel to the Faculty of Management, Tribhuvan University for the Doctor of Philosophy of this University is completed under our supervision and guidance. The thesis is the candidate’s original work. We have carefully read this final work and we are fully satisfied with the substance of the thesis submitted to the Faculty of Management.

To the best of our knowledge, the candidate has also fulfilled all the other requirements of the Faculty of Management, Tribhuvan University. We, therefore, recommend that this thesis be considered for the award of PhD.

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ABBREVIATIONS AND ACRONYMS

ASC	- Agriculture Service Center
CBOs	- Community Based Organizations
DADO	- District Agriculture Development Office
DDC	- District Development Committee
DOA	- Department of Agriculture
DoAD	- Department of Agriculture Development
DoLS	- Department of Livestock Services
FGD	- Focused Group Discussion
GDP	- Gross Domestic Product
HMG/N	- His Majesty's Government of Nepal
INGO	- International Nongovernmental Organization
JT	- Junior Technician
JTA	- Junior Technical Assistant
LSGA	- Local Self Governance Act
MOAC	- Ministry of Agriculture and Cooperatives
MoAD	- Ministry of Agriculture Development
NAES	- National Agriculture Extension Services
NARC	- Nepal Agricultural Research Council
NGO	- Nongovernmental Organizations
POs	- Private Organizations
UNDP	- United Nations Development Program
VDCs	- Village Development Committees
VDC	- Village Development Committee

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CHAPTER I

INTRODUCTION

The aim of this chapter is to provide the background information for explaining the effectiveness of agriculture service delivery at the grassroots level in Nepal. ‘Grassroots’ refers to state administration systems at the county level and below (Zhe, 2014). ‘Grassroots’ in this study refers to the lowest tier of government mechanism which provides services to the farmers at the Agriculture Service Centers level. The ASCs are the lowest level of agriculture service delivery units which provide agriculture services to the farmers through groups or field visits. Furthermore, this chapter consists of research context, research problem, objectives of the research, operational definition of grassroots governance, limitations of the study, significance of the study, and organization of the thesis.

1.1 Research Context

Serving the people has been a practice in Nepal, and is as old as the society itself. Serving to the people has been mainly initiated by the philanthropic philosophy as well as religious values and they became part of the daily life of the people as well as governance principles of the society (Dhakal, 2006). Delivery of services through voluntary informal social organizations such as *Guthi*¹, *Parma* and *Dhikur* have been prominent in the Nepalese society. These informal grassroots organizations were people-

¹Guthis were the social institutions created both before and after unification of the country in 1769. They were basically for performing funeral, wedding, and religious ceremonies including construction and/or repairing the temples and other public infrastructures. Community contributions basically in land grant and sometime in cash as well were the basic sources for the regular operation of Guthi. Such Guthis were classified into three broad categories namely Raj Guthi (created by official or national trusts), Chut Guthis (semi autonomous status), and Niji Guthi (managed solely by the Guthiyars (Guthi members)). Some of these traditional Guthis have still in existence and performing as usual.

based organizations which were primarily focused on serving individuals as well as collective interests through local institutions.

Apart from these, similar types of people's organizations which were created within some of the ethnic communities were *Bhejas* among Magars, *Chumlung* among Rai & Limbu, *Nangkhur* among Tamangs, *Nogar* among the Gurungs and *Bolawanegu* among the Newars, Dharma Phanchayat among Thakali, etc. (Lama, 1992, p.85; Pokharel, 2000, p.58 cited in Dhakal, 2006). These traditional institutions mainly existed as they were community based, no official or legal recognition, voluntary membership, leadership based on seniority, extensive use of local resources, concern and priority to help disadvantaged, individuals, families, small group size, less formal structure, no formal rules and regulations, decisions made through mutual consultation & agreement, extensive use of indigenous knowledge, and effective & sustainable (Bhattachan, 2000, p.74). These were grassroots organizations, which were self-organized groups of individuals pursuing common interest since there hardly existed any formal organizations to provide services at the grassroots level.

Grassroots² organizations are those which make delivery of services close to the people through field level offices. The rise of formal grassroots organization as key actors in service delivery in the developing countries can be understood as a new form of governance as it demands people's participation more in planning, decision making and benefit sharing and the issues of public service delivery are multifaceted, complex and multidimensional in nature (Aminuzzaman, 2013). Before 1951, the government machinery was devoted to pleasing the autocratic rulers and the services and facilities were mainly provided for the elites in power. Only after 1951, the government started thinking of providing services to the ordinary citizens through public service delivery mechanisms. During these periods tremendous changes have taken place in terms of access to the basic services and improving living standard of the people (Sharma and Muwonge, 2010; Chitrakar, 1990).

² 'Grassroots' refers to state administration systems at the county level and below. Grassroots governance is the concrete embodiment of state administration within the society (Zhe 2014). In this study ASC is the grassroots or field level organization, the lowest tier, which uses different mechanism such as farmers group, women's group and the individuals for delivery of services.

Despite the developments Nepal still faces challenges in public service delivery and health, education, communication and agricultural services are devoid of essential human resources and technology causing a poor state of service delivery. There are various service delivery organizations which deliver services at different levels. The table below exhibits the organizations responsible for service delivery from different levels of the government.

Table 1.1 Service Delivery Organizations at Different Levels

Administrative	Political	Non-governmental Organizations (NGOs)	Indigenous People's Organizations/ Community based Organizations	Ministry of Agriculture and Development (MoAD)
Central	Parliament	Central	0	Department of Agriculture (DoA)
Regional		Regional	0	Regional Offices
District	District Assembly	District	0	District Agriculture Development Office (DADO)
Ilaka (Area)			0	
Village	Village Assembly	Village	Many people organization(people level/community level)	ASC level (field level/grassroots level)

Source: Developed by the author

Regarding agriculture service delivery, the MoAD has extended its arms up to the ASC level. ASCs are the lowest tier of service delivery mechanism of the government which provides services to the farmers both from the service centre and field visits. The following section makes a brief description on how government mechanism makes the delivery of agriculture services.

1.2 Agriculture Extension and Research in Nepal

Agriculture extension service is an important undertaking of Nepal government to educate, disseminate information and support the livelihoods of the Nepalese farmers. The major objective of extension service is to provide both productive inputs and services to teach farmers about improved technologies for improving their production, incomes and standard of living (DoA, 2005). Furthermore, the extension service helps to

improve the farming communities by forming farmers groups to help them to decide on how to make best use of available resources and to articulate the needs of farmers.

Nepal made some efforts in agricultural development during *Rana* regime, but it was limited to solve the food crisis and survive from the effects of recession brought by two world wars (Paudel,1986). Since 1950, government has implemented several extension models and approaches with donor support or support from the government's own resources. The models and approaches adopted are conventional T and V, Block Development, IRDP, Tuki, Farming System Approach, Farmer Group Approach, contract out/ partnership of Extension Programs and IPM (Farmer Field School). These approaches made significant contribution to educate and transfer of technology. Now there are various organizations other than government agencies providing extension services to the farmers on contract out or partnership basis. The agriculture extension service providers in Nepal can be identified as governmental, community based organization (CBOs) such as farmers associations and cooperatives, developmental and institutional organization (IAAS, NARC, Vocational Trade Schools, NGOs, training institutions, etc.) and private service providers/processors, contractor/consultant.

There are two main agencies working for agricultural technology development and dissemination. Nepal Agriculture Research Council (NARC) is responsible for research and the Department of Agriculture (DOA) takes responsibility for extension. Those two organizations both fall under the Ministry of Agriculture Development. There are all together 1772 offices (1703 offices under Ministry of Agriculture Development - Department of Agriculture and Department of Livestock Services (recently converted as the Ministry of Livestock and Birds) and Cooperatives (converted as the Ministry of Cooperative and Poverty Reduction); 69 offices under NARC, devoted to research). Of these offices, 49 offices are at central level and 50 further offices are at regional level. The numbers of district level offices is 227. There are 1823 scientists and support staff under NARC (Dahal, 2010). The mandate of NARC is to test, verify and recommend new agricultural technologies or packages of practices for use by farmers. Such technologies and recommendations that are developed by scientists then pass to the extension service from where they are brought to farmers' fields through training, demonstration and seed kits.

Under the Department of Agriculture there are 75 District Agriculture Development Offices (DADO) and 378 agriculture service centers (ASCs) assigned to agricultural technology support (crops, horticulture, fisheries) (FAO 2010). DADO and ASCs form the main outlet for new technologies that have been recommended and approved by research and that are intended for farmers (see Appendix V for organizational Chart of MoAD).

In the field, one ASC has to cover about 8,000 farm households (Dahal, 2010) by three front-line extension workers (at the level of Junior Technician or Junior Technical Assistant). Dahal (2010) mentioned some critical issues and challenges for the agricultural extension system in Nepal. These include low service coverage, poor technical competencies of the extension workers, low investment in agriculture, and poor infrastructure. Together, these shortcomings make the extension system function with low efficiency. To improve technical support and to increase coverage, the Department of Agriculture has started a group approach in 1989. This approach involves transfer of knowledge, technology and providing additional support and also credit to farmer groups. Through this approach, service providers (government and non-government partners) are working closely with farmers groups in training and technology dissemination. Currently, this group approach is the main approach for agricultural development in Nepal (K.C. et al., 2003). However, even under this approach the coverage of extension remains below 20% and service quality that is provided is still not very effective (Dahal, 2010).

Despite of the efforts made by the extension system, there are still several problems and issues that require attention to perform its function more efficiently and effectively. Major challenge extension system is how to serve the majority of rural poor and socially disadvantaged groups who had long been neglected by extension and other services (DoA, 2005). Other problems are inadequate linkages among research and extension, education to farmers and other stakeholders, poor infrastructural development, insufficient number of staff to cater diversified agriculture services.

1.3 Investment for Agriculture Research and Extension

Agriculture in Nepal contributes around one-third of national gross domestic product. Government of Nepal (GoN) articulated the importance of agriculture and has prioritized agriculture in its plans, policies, annual budget and programs since last three years. The

MoAD reports states that every year budget under MoAD has increased substantially. The first periodic plan has emphasized agriculture both as immediate action and laying of foundation for future progress and allocated Rs. 12 million to the agriculture out of Rs. 330 million (NPC, 1956). It is only in the Fifth Plan (1975-80) which has prioritized agriculture sector and celebrated 1975 as agriculture year. The Ninth Plan (1997-2002) is also important period for the agriculture sector. During that period, a long term strategy for agriculture sector, Agriculture Perspective Plan (APP) was designed and formulated for the overall national growth through agriculture growth (Mongues *et al*, 2012). Similarly, during the recent Thirteenth Three Year Plan (2013/14-2015/16) Agriculture sector received proportionately higher budget amount and proportion to national budget.

Table 1.2: Details of Budget Outlay in Ministry of Agriculture Development and Its Share to the National Budget during 2002/03 to 2015/16

FY	National Budget (Rs., 000)	MoAD Budget (Rs., 000)	Share of Agriculture Budget to National (%)
2002/03	96,124,796	2,423,526	2.52
2003/04	102,400,000	2,472,945	2.41
2004/05	111,689,900	2,692,284	2.41
2005/06	126,885,100	3,178,473	2.51
2006/07	143,912,300	3,516,279	2.44
2007/08	168,995,600	4,176,853	2.47
2008/09	236,015,897	5,759,500	2.44
2009/10	285,930,000	7,876,587	2.75
2010/11	337,900,000	10,523,526	3.11
2011/12	384,900,000	12,431,084	3.23
2012/13	404,824,700	12,297,141	3.04
2013/14	517,240,000	21,403,127	4.14
2014/15	618,100,000	23,283,178	3.77
2015/16	819,468,884	26,682,580	3.26

Source: MoAD, Budget and Program Section, 2017

Average budget allocations to agricultural research and extension remain around 3% of the total national budget except in FY 2013/14. It is less than 1% for agricultural extension and less than 0.5% for agricultural research, the remaining 1.5% is spent on subsidy of fertilizer (Dahal, 2010). The allocation of budgets across salaries, operating costs and capital investments further affects the efficiency of agricultural research and extension. Similarly, more than 67% of the allocated annual budget of DADOs and around 53% budget of NARC went to staff salaries (DADO, 2012). Therefore, there

remains only limited budget for real agricultural research and extension work like research trials, laboratories expenses, trainings and demonstrations cost, mobility of staffs (materials/operational cost).

1.4 Governance of Agriculture Services at Grassroots

Governance has become more of a problem solving issue in the contemporary political and development discourses at local, national and global levels around the last three decades as to make the service delivery transparent, accountable, predictable and participatory. Governance is the need of the poor developing countries from humanitarian perspectives as it brings reform in the governing system and focuses on the 'functional rather than on the structural aspects' (Dhungel, 2002). Furthermore, the primary concern of governance is with 'the proper exercise of economic, political, and administrative authority to manage a country's affairs at all levels' (UNDP, 1997) and it is mainly carried out by governments, private sector and civil society for the direct benefit of the ordinary people and for the betterment of society.

Governance is being imbued with different meanings and used in different ways (Levi-Faur, 2012, p.3; Pierre and Peters 2000, p.10). Various phrases such as "good governance", "global governance" (Bevir, 2011, p.10) "sound governance" (Farazamand, 2004), and "good enough governance" (Grindle, 2007) have been used. The major reason for its popularity is its inclusiveness: it is broader than the traditional government concept, and it encompasses other actors such as non-governmental organization and civil society (Weiss, 2000). According to Fukuyama (2013) governance means government's ability to make and enforce rules and to deliver services, regardless of whether that government is democratic or not. Similarly, Rosenau (1995) opines that governance can take place at different levels from grassroots to global.

Similarly, decentralization promotes governance by empowering people and devolving power to the lowest level of government, which will be best suited to provide local services in an effective and efficient manner. Decentralization could lead to increased devolution of financial resources to sub national governments, which in turn might imply increased allocation of resources to sectors, such as health, education, agriculture. Moreover, decentralization helps to unite ethnically diverse countries being concentrated on finding ways of working together to provide public services and in this sense decentralization may serve an opportunity.

Governance and decentralization deal with the issues such as citizen participation, monitoring of performance, authority delegation, institutional capacity, participation, transparency, fairness, equality, opportunity, choice, coordination, autonomy, predictability, accountability (detailed discussion of governance concept and decentralization is in Chapter Two). Such issues may transcend both at the central level of policy making to the local level in which there is the involvement of various service providers and service receivers. This research uses the factors authority delegation, institutional capacity, people's participation, organizational coordination to explain the effectiveness of agriculture service delivery at grassroots in Nepal.

Authority delegation is an activity by which right is delivered to individuals or groups for acting, making decisions, acquiring resources for performing the task to fulfill the given responsibility (Rondinelli, 1983). Therefore, it is necessary that adequate authority is delegated by the policy design (rules, regulations) for accomplishing the job given appropriately.

Institutions include the structures, processes and behaviors that shape the service providers' behavior as well as the behaviors of the service receivers by making them responsible towards their demands (Jain, 2009). Institutional capacity also determines on what to deliver, how to deliver and when to deliver by making the optimal use of both human and physical resources, employee's professionalism and use of information technology (IT).

Participation is a process of involving people mentally and emotionally for the achievement of group goals which may be shared individually or collectively. Furthermore, public participation demands the involvement of affected public from raising voice of their demands to participation in decision making (Dhakal, 2012, p.3-4) Therefore, public participation denotes that people's participation will influence the decision.

Organisational coordination plays a significant role in the service delivery as it helps to understand the various processes in which people are served (Jamil, 2014). Further, Verhoest and Bouckaert (2005) state that inter-organizational coordination is more network-based, while intra-organizational coordination is more hierarchy-based (cited in Christensen and Lægheid, 2008, p.102).

Agriculture plays a pertinent role in Nepalese economy. Almost two thirds of the population still depends on agriculture for their livelihood. Although there have been some efforts for developing agriculture service delivery from *Rana* regime, the agriculture sector still remains stagnant. In this backdrop, this study strives to decipher the effectiveness of agriculture service delivery at the grassroots level. In this study, the effectiveness of agriculture service delivery is a dependent variable and factors affecting it are independent variables. Therefore, for exploring the factors affecting the effectiveness of agriculture service delivery system at grassroots level, this study makes efforts to understand and explain the wider factors such as policy environment, authority delegation, participation, coordination, the possession of relevant skills, managerial competencies, and issues relating to organizational structure and professional values. Furthermore, both quantitative and qualitative data are applied for measuring the effectiveness of agriculture service delivery.

1.5 The Research Problem

Ranges of services that are delivered by government are economic, infrastructure building, social as well as active role in governance. Although service units are administratively and financially managed by the district level offices they are controlled by their regional offices, the central level departments and ministries (Shrestha, 2001, Upreti, 2002). Therefore, there seems to be a long chain involved between service delivery units at local levels and the ministries in terms of budgeting, planning, programming and staffing. Hence, the role of the central government in service delivery³ is critical since it has the lead role in policy formulation, financing, regulation and actual delivery, however, service delivery has not been efficient and effective, owing to ‘a long chain involved from policy formulate poor match between financial allocation and preferences’ (Koirala, 2005, p.2-5), among others. The other reasons may be the lack of mutuality, reciprocity and continuous learning which lead to the poor service delivery in the context of developing countries.

³Most of the ministries such as health, education, agriculture, post office have their own offices at district level which play a significant role in delivering services under their jurisdictions. Some of the district level offices have their delivery units down to the Ilakas and ASCs (the sub nation levels) as well as Village Development Committee (VDC) level.

Thapa (2010) as well as Singh and Colavito (2005) stated that the services provided through Agriculture Service Centres (ASCs) are not adequate for the people and the quality of services have often become the pertinent issue due to centralization of services, non-responsiveness to local needs, non-participation, lack of trained human resources, inadequate capacity to regulate and ensure quality control, inadequate technology. Further Ashby et al. (1995) argue that agriculture extension is seen as a public enterprise and is guided by the overall development paradigm, which is still top-down in nature. A general weakness of top-down development is provision of services by the state, bypassing resource-poor people and their organizations. Agricultural extension constantly neglects the issues and concerns of resource-poor farmers.

Similarly, Shrestha (2004) in his study revealed that more than two thirds of respondents of the selected districts were either dissatisfied or neutral on the issues of availability of services, behavior of service providers, working style of service providers, knowledge of service providers about service need of people and credibility of service providers. Likewise, Koirala (2005) claimed that centralised, ineffective and delaying government mechanisms for handling development activities have been unable to prove its efficiency and effectiveness in service delivery.

Agriculture is considered to be the backbone of Nepalese economy and agriculture extension is seen as a public undertaking which is guided by the overall development paradigm. Although there are private sectors and NGOs/INGOs for providing agriculture services at grassroots level, Nepalese government also provides agricultural services to people with its own institutional arrangements and networks. Moreover, almost one third of the GDP (31.6%) is generated from the agriculture sector and 65.7 percent of the total population still depends on agriculture for livelihood (MOAD, 2015; Economic Survey, 2072/73).

Agriculture has to play a pivotal role in reducing poverty, ensuring food security, sustaining livelihood of poor and marginalized community and balance of trade. Therefore, the governments have been investing around 3% budget in this sector and various policies, plans and strategies such as Agriculture Perspective Plan (APP) (1995-2015), National Agriculture Policy 2004, National Agriculture Extension Strategy 2007, Agriculture Development Strategy 2015 have been in practice, however, the indicators such as lack of employment generation, self-sustained approach of farming style,

professionalism in farming, reduction in foreign labor migration show the deteriorating trend so the problem of agriculture service delivery has often become a debating issue. Although the annual growth rate of agriculture sector in the thirteenth plan was expected as high as 4.5 percent but it stood to the mere 2.22 percent (NPC, 2016, p.3). This picture demonstrates a sharp decline in the agriculture sector and negative picture of its growth and attraction. This situation also reflects that there is a great discrepancy between what is promised and what is delivered in terms of providing agriculture services at the grassroots level. Therefore, the pertinent question is to find out ‘what’ ‘why’ and ‘how’ about the effectiveness of agriculture service delivery at grassroots level in Nepal despite two third of population’s involvement and investment of huge amount from government in agriculture sector.

1.6 Objectives of the Study

Most studies mentioned above and presented in literature review (in Chapter 2) endeavoured to explain the delivery of agriculture services mainly being concentrated on economic and administrative aspects and did not consider on the input (providing goods and services) and output (actual result and effect on the farmers) relationship. They also did not make the comparative case study design for exploring the intricacies of service delivery. Therefore, the major objective of this research is to examine the factors affecting the effectiveness of agricultural service delivery at grassroots level by explaining policy provisions and the role of various stakeholders in achieving the intended outputs. This study specifically strives to achieve these objectives:

- To analyze the state of agriculture service delivery and policy provisions of authority delegation at grassroots level in Nepal.
- To assess the institutional capacity of the service centers in terms of the effectiveness of agriculture service delivery.
- To evaluate the level of participation at grassroots level in the context of effective agriculture service delivery.
- To elucidate the role of organizational coordination in agriculture service delivery.
- To analyze how service providers and service receivers perceive on the present state of agriculture service delivery.

Specifically, this study tried to answer the following questions related to current status of agriculture service delivery in Nepal.

- To what extent has the authority been delegated to the service providers for delivering services in accordance with the demands of service receivers?
- How competent are service providers in service delivery at the grassroots level?
- What is the status of infrastructural facilities of services delivery institutions?
- To what extent the service delivery agencies are coordinated to each other?
- Why is people's participation important for effective agriculture service delivery?
- What mechanisms are used for people's participation?

1.7 Operational Definition: Grassroots Governance

Peters and Pierre (1998, p. 232) note 'governance is about maintaining public-sector resources under some degree of political control and developing strategies to maintain government's capacity to act' in the face of management tools that replace highly centralized, hierarchical structures with decentralized management environments where decisions on resource allocation and service delivery are made closer to the point of delivery. Governance encompasses the activities of governments undertaken to meet the basic policy essence and spirit for fulfilling the goals, and objectives of programs or projects aimed at delivering services. Furthermore, governance can take place at global national, local and grassroots level. The ASCs are the grassroots organizations, (i.e the lowest tier of agriculture service delivery point) of delivering agriculture services, and for the effectiveness of service delivery at the grassroots level there should be quality of services, accessibility, and satisfaction with services as well as achievement of goals. This study uses four important factors such as authority delegation, institutional capacity, people's participation as to explain the effectiveness of agriculture service delivery at grassroots level.

The field level agriculture service delivery activities which provide services to the service seekers through visits, interactions, discussion or direct delivery of services through service centers is explained as 'grassroots governance' in this study. This level is different than the other level of governance as the other level of governance are associated more with policy making and the grassroots level governance is more related with the implementation of policies by the street level bureaucrats. From supply side,

ASC is the grassroots where service providers deliver services to the farmers and farmers are the grassroots from demand side. This study explains that grassroots governance is a boundary exchange level for public service delivery system where authority delegation, people's participation, institutional capacity and organizational coordination occurs more in planning, decision making and benefit sharing.

1.8 Limitations of the Study

The agriculture service providers in Nepal can be identified as governmental, community based organization (CBOs) such as farmers associations and cooperatives, developmental and institutional organization (IAAS, NARC, Vocational Trade Schools, NGOs, training institutions, etc.) and private service providers/processors, contractor/consultant). This study only concentrates only on agriculture service delivery by the lowest tier of government mechanism known as ASC.

Moreover, this study concentrated on governing pattern of ASCs and its effectiveness in the delivery of agriculture services. The study also limits its boundary by analyzing the policy efforts by the Nepalese government up to 2015 and it doesn't concentrate on the economic or financial aspects of effectiveness.

As this study shows the real world situation of effectiveness of agriculture service delivery of selected three ecological regions, this study may/may not be useful to explain the situation of other service delivery sectors.

Similarly, this study concentrated only on service delivery by ASCs although there are various grassroots organizations such as school, health post, veterinary office, post office, which are providing services at the grassroots level.

1.9 Significance of the Research Study

The main objective of this study is to decipher the effectiveness of agriculture service delivery at grassroots level in Nepal. To the best of my knowledge, there does not exist a research onto explain the effectiveness of agricultural service delivery at grassroots level in the Nepalese context. The study methods used in this study are review of literature, questionnaire, interview and focus group discussion. The analysis of information obtained from both the quantitative and qualitative methods have profoundly investigated the problem.

The study is significant for a number of reasons including:

- This study explains why grassroots governance is/ is not effective and how to make local governance effective especially in agriculture sector. This study tested the relationship between authority delegations, organizational relationship, and participation in relation to effectiveness of agriculture services in developing country like Nepal. Besides this, this study also explained why institutional capacity and organizational coordination mattered more in the effectiveness of agriculture service delivery than people's participation and authority delegation.
- It gives an added value to the knowledge base on grassroots governance and serves as an impetus for future research into similar areas.
- It could also serve as a guide to policy makers, development workers and other stakeholders to apply the knowledge in Nepal in particular and the developing world in general.
- It highlights challenges and problems of service delivery at the grassroots level in a third world context.

1.10 Organization of the Thesis

The whole study is organized in seven chapters. A short description of all the chapters content is given below.

Chapter one introduces the research topic, giving a brief sketch of research context in relation to grassroots level governance in Nepal. This chapter also highlights the research problem by explaining the actual status of agriculture service delivery at grassroots and why the topic is a researchable issue. Furthermore, the major research objectives, significance of study are stated and finally it ends with the outline with the thesis.

Chapter two discusses the conceptual and theoretical aspects of governance and decentralisation theory, which are delineated with the study of the effectiveness of agriculture service delivery in Nepal. Similarly, this chapter interlinks theoretical framework for explaining the relationship between dependent variables and independent variables. This chapter gives a sense of direction for analysing the data. The effectiveness of agriculture service delivery at grassroots is a dependent variable which is operationalized as timely delivery of services, quality of service, satisfaction with the services, achievement of goals, accessibility and the independent variables as authority

delegation, institutional capacity, peoples' participation and organisational coordination are the factors which affect the dependent variable.

Chapter three is a research design and methodology chapter which explains research design, selection of the study area, methods of data collection, and analysis of data. This chapter proves the rationale of using the mixed research design and methods for the research.

Chapter four devotes to explain the practices of agricultural service delivery in Nepal and reviews the policies and plans related with the concept of grassroots service delivery process and effectiveness of service centres at grassroots level.

Chapter five has explained effectiveness of agriculture service delivery at grassroots level by analysing the data and information obtained through questionnaire. The data basically consists of the perceptions, attitudes, and viewpoints of service receivers on the effectiveness of agriculture service delivery at grassroots level viz. service centre.

Chapter six focuses on the factors affecting agriculture service delivery at grassroots level. In doing so the quantitative and qualitative information has been collected and analysed being based the independent variables. Both the views of the service providers and service receives have been incorporated to find out and explain what factors contributed for the effectiveness of agriculture service delivery. The independent variables have been presented and discussed in subheadings.

Chapter seven is a recap of the whole study. This last part presents the summary, findings and main conclusions in the thesis. This chapter further points out some of the contributions of this thesis to the existing knowledge on grassroots governance.

CHAPTER II

GOVERNANCE CONCEPTS AND THEORETICAL FRAMEWORK

The purpose of this chapter is to provide a broad conceptual base for approaching the context of governance which is assumed to have a great linkage to explain the relationship with the effective service delivery process of the grassroots organization viz. agriculture service centers. Furthermore, this chapter considers the historical circumstances surrounding the emergence of governance as the predominant development paradigm of the last three decades, identifies the different forces driving the adoption of governance policies and look at the specific priorities and theoretical issues concerning the validity of governance in the context of broader academic debates. Similarly, it makes an overview of governance efforts made in Nepal and examines its use in plans and through some Acts after the 1990s. Finally, this chapter explains the dependent and independent variables under study so that the conceptual framework can explain the factors affecting the effectiveness of agriculture service delivery at grassroots level in Nepal.

2.1 The Evolution of ‘Governance’ Concept

The origin of the concept of governance can be traced back to the political philosophers both in the European tradition (e.g. Aristotle) and eastern civilization (e.g., Confucius or Gandhi). The concept of governance has various theoretical roots such as political science, public administration, comparative politics, development studies, institutional economics, international relations and Foucauldian-theories (Stoker, 2007). Furthermore, political scientists looked for the governance concept to deal with inter-jurisdictional policy issues and international relations scholars looked for the term as a means of analyzing the emergence of global issues and challenges. Finally, students of comparative politics started using the term in the context of the democratization that

began in the wake of the fall of communism. Therefore, the origin of governance concepts seems to have myriad dimensions both national and international. Moreover, the concept of governance emerged in the aftermath of the wave of new public management reforms sweeping across many countries in the 1980s and 1990s (Kjær, 2004).

The first use of the term 'governance' is attributed to Harlan Cleveland in the early 1970s. Writing a guide for the future managers, he stressed the need for horizontal relations between organizations rather than the vertical arrangements of conventional organizations (Cleveland, 1972). His assumption was that people wanted less of government and more of governance. Hence the governance concept came to be associated with two simultaneous trends; firstly the blurring of the relationship between what is public and private and similar tendency to blur the relationship between policy and politics (Hyden, 2011, p.2). Recently the concept became gradually associated with the New Public Management School and its prescriptions for reforming public administration by contracting out responsibilities to non-state actors. The term, in the European context has been approached as more descriptive term as a new decision making reality characterized by inter-organizational dependencies rather than prescriptive term to respond to the societal needs and aspirations.

Furthermore, there has been the contribution of multi-stakeholder scholarly community, donors, governments as well as civil society actors in the evolution of the governance concept. Since the 1980s the interpretation of good governance had undergone further modification to mean a democratic capitalist regime, presided over by a minimal state which is also the part of the wider governance of the New World Order (Jain, 2009, pp.3-4). It would be interpreted to denote not only a diminishing role of bureaucracy, but a regular process of debureaucratization and a competition between the private and public sector, with the role and participation by non-state voluntary sector, the so called NGOs in the process of society's development.

Hyden (2011, pp.5-9) has classified the evolution of the governance concepts in three phases. The first wave of interest in governance (1990s) was mainly academic and there was no explicit attempt to make the data accessible for policy makers and practitioners. During that period, the international development community borrowed insights from mixed intellectual menu created the scholarly community in devising its work on

governance, the focus was on creating specific program interventions and assessing progress towards what was defined as good governance. In this phase members of the donor community wanted definitions that suited their own programmatic orientations and needs.

The second wave was driven by optimism and heavy emphasis was laid on quick fixes and results. Donor agencies had heavy hand in the field of governance as they fine tuned their instrument and used their prescriptive devices as aid conditionality. The application of governance initiatives was highly debatable in this phase as the donor agencies underestimated the capacity of existing institutions and focused on wholesale reforms, turning the existing institutions whether governmental or non-governmental as experimental stations for donor funded projects at the cost of improving governance. Furthermore, there has been a tendency to overemphasis the supply side of governance rather than its demand side as governance is believed to serve as a precondition for development.

The third wave of governance emphasized on human rights and social development issues and it was influenced by social movements and activists groups around the world. This bottom up alternative to mainstream donor dialogue on governance emphasizes the role of civil society circles and it has been very significant in countries of the South like India, Brazil, and Mexico. The new emphasis on citizen led governance activities with a practical orientation toward holding governments publicly accountable constitutes the third wave in the evolution of the governance concept.

Table 2.1 Shifts in the Use of Governance Concepts

	1990s	2000s	2010s
Agenda setters	Academics	Donors	Citizen activist
Main approach	Analytical	Programmatic	Empowering
Position adopted	Detached	Managerial	Engaged
Principal aim	Generating knowledge	Reforming institutions	Checking power use

Source: Hyden, 2011, p.7

The table demonstrates that governance concept has shifted its focus from being largely an analytical tool to an empowering activity that engages people with direct practical and political implications. Furthermore, governance has become increasingly street level

phenomenon where various stakeholders of governance such as institutional actors, civil society as well as common public interact for accomplishing the intended consequences.

2.2 Defining Governance

The notion governance as a buzzword or a reference to specifically defined set of ideas and policies, originated in a 1989 World Bank document entitled *Sub-Saharan Africa: From Crisis to Sustainable Growth*. The notion of good governance in the seminal document was strongly associated with the types of structural adjustment policies that the World Bank had been advocating for many years. It includes reduced state intervention in economic decision-making, an efficient and effective public service, reduced public sectors and more efficient and transparent public sector administration; freer markets and the elimination of unnecessary public subsidies, and increased integration into the world economy generally. Similarly, Hyden (2011) and Jain (2009) opined that the concept further evolved with the worldly accepted norms and values of democracy as well as for appraising the performance of their government leaders, institutions, and policies, confidence and trust in government institutions, satisfaction with democracy, patterns of political behavior and civic engagement, and social and political values.

Governance has become more of a problem solving issue in the contemporary political and development discourses at local, national and global levels over the last two decades as to make the service delivery transparent, accountable, predictable and participatory. Governance is the need of the poor developing countries from humanitarian perspectives as it brings reform in the governing system and focuses on the 'functional rather than on the structural aspects' (Dhungel, 2002). Furthermore, the primary concern of governance is with 'the proper exercise of economic, political, and administrative authority to manage a country's affairs at all levels' (UNDP, 1997) and it is mainly carried out by governments, private sector and civil society for the direct benefit of the ordinary people and for the betterment of society.

The object of initiating governance was that sound economic development policies would help to 'encourage the suitable political environment for sustainable growth by creating accountable environment which many developing countries hardly experienced previously' (Najem, 2003, p.2-3, Jain, 2009). Furthermore, the concept has been expanded by the World Bank and other international aid donors, non-governmental

organizations, academics and Western governments and politicians to encompass a much broader and more generalized range of ideas and policies.

Essentially, the concept of good governance as it is presently used includes all of the following: economic liberalization and the creation of market friendly environments; transparency and accountability with respect to both economic and political decision-making; political liberalization, particularly democratic reforms; rule of law and the elimination of corruption; the promotion of civil society; the introduction of fundamental human rights guarantees, especially with respect to political rights such as freedom of expression, freedom of assembly and freedom from arbitrary imprisonment; and the adoption of policies designed to safeguard long-term global interests like education, health and the environment (UNDP, 1995; International Monetary Fund, 1997). To elicit the concepts of governance the views of various scholars/writers have been forwarded as follows:

Panday (2001) viewed that governance is multidimensional or multifaceted phenomenon and it incorporates political, technical and ethical aspects. Political aspects denotes to the participation and legitimacy aspects of governance, while the focus on technical dimension may stress efficiency in the use of resources and its outcomes. The ethical side can capture the very purpose behind governance, emphasizing the centrality of the norms and values that must govern the relationship between the governors and the governed. Furthermore, governance is to be seen in the case of developing countries as a problem solving methods to address peoples' grievances as well as efficient mechanism for service delivery.

For Rhodes (1996, pp.652-3) governance denotes to a 'change in the meaning of government referring to a new process of governing; or a changed condition of ordered rule; or the method by which society is governed'. Similarly, Baral (1994, p.1) views "governance as a process of political management, aims at maintaining order, ensuring popular legitimacy, responding to problems through appropriate mechanisms and strategies, remain neutral in providing basic human rights to people and developing both effectiveness, accountability in all activities undertaken at the state level". Their views of governance is more related with the rules and procedural matters by which institutions behave to facilitate in providing an ordered rule to collective action and to the society as a whole.

For Kooiman and Van Vilet (1993, p.64), the governance concept demands the creation of new mechanism which cannot be externally imposed but is the result of the interaction of a multiplicity of governing and each other influencing actors. His definition not only rejects the idea of the effective role of traditional institutions but also focuses on the interaction among various actors in the process of governance and the systemic relationship with each other.

Osborne and Gaebler (1992) define governance as the system by which government might make sensible and effective use of wider range of tools beyond the direct provision of services. Governance for them is meant as contracting, franchising, and new forms of regulation, or managerial tools to enhance the productive capabilities of public institutions.

Stoker (1998, pp.217-218) proposes five propositions of governance which are as follows: Governance refers to institutions and actors from within and beyond government. Governance identifies the blurring of boundaries and responsibilities for tackling social and economic issues. Governance identifies the power dependence involved in the relationships between institutions involved in collective action. Governance is about autonomous self-governing networks of actors. Governance recognizes the capacity to get things done which does not rest on the power of government to command or use its authority. The propositions explained above accommodates many of the idea associated with governance, however, it fails short of explaining the process by which governance can best be achieved.

World Bank (2000) defines governance as 'the institutional capacity of public organizations to provide the public goods demanded by a country's citizen or their representatives in an effective, transparent, impartial, and accountable manner, subject to resource constraints' and one of the aspects of this institutional capacity is a strong and active civil society which reflects the capacity of public organizations to deliver services effectively. Furthermore, World Bank has identified three aspects of good governance: the form of political regime; the process by which authority is exercised in the management of a country's economic and social resources for development, and the capacity of the government to design, formulate and implement policies and discharge functions.

Upreti (2002) pointed out three main aspects of governance. First, good political governance: it includes constitutions; free and fair elections; decentralization ensuring popular participation in the decision making; equality before law; accountability and transparency of decision makers; absence of minority and gender-discrimination, peace and social harmony. Second, local economic governance: it would include macro-economic stability; sufficient budgetary allocations for social development; progressive taxation; subsidies for the poor; corporate rights and equitable access to credit and land. Third good civic governance: it involves creation of a civil society as containing following aspects; respects for human rights; protection to minority, poor and depressed section of society; empowerment of people and encouragement of corporate social responsibility.

Governance is the interactions and participation of different stakeholders at various levels in a larger system. As governance embraces “the interactions among different levels – local, sub-national and national – as well as across sectors, and, finally, regionally and globally, Governance systems have a clear set of rules on how to reach consensus and take decisions, including the mechanisms to hold decision-makers accountable for their actions” (Cichlid, 2008, p.21). Therefore, governance may be envisioned as a process which emphasizes from 'command-and-control to interaction' where various stakeholders participate to foresee and materialize the specified goals and objectives.

Hyden (2011, p.4) opines that the intellectual heritage on which governance discourse rests is varied and complex. He proposes two parameters: (1) effectiveness and (2) legitimacy. Influences from public administration in particular come closest to the effectiveness dimension while those from international relations and comparative politics are closer to the one emphasizing legitimacy. The former tends to encourage a managerial and technocratic approach to governance while the latter give rise to a focus on the political aspects of governance. The former treat governance as an instrument to get things done with greater effect and is manifest, for example, in the donor interest to make aid delivery more effective. The latter encourage thinking about how things are done and lead to concerns about respect for the rule of law and how the state interacts with citizens.

Neumayer (2003) claims that the term 'governance' is sometimes rather narrowly defined in terms of public sector management with, for example, democracy and respect for human rights being seen as additional to good governance. Broad and comprehensive view of governance is defined as 'the way in which policy makers are empowered to make decisions, the way in which policy decisions are formulated and implemented and the extent to which governmental intervention is allowed to encroach into the rights of citizens. Governance respects the political, civil and human rights of citizens, is in accordance with the rule of law, provides effective and non-corrupted public services to the people and utilizes public resources in an accountable and transparent way and with the aim of promoting the general social welfare ' (2003, p. 8). His definition is broader in the sense that it does not only incorporate participation but also demands adequate resources and the institutional ability for the effective decision making, which is critical prerequisite of governance.

Khauaja (2001, p. 1-3) explains that governance is not only meant to stimulate intellectual discourse but it has to deliver services in such a way that the benefits accrue to the people from the policies, programs and projects undertaken by the government. The benefits of these efforts should be accessible to the people at large. Good governance has to deliver results in at least four areas. First, it includes the facilitation and satisfaction of the customer second the wellbeing of employees third, growth and development of the organization, and fourth the investor. The terminology may seem odd because it has been used in the business enterprises but it could relate to any sector with the same effectiveness and clarity.

Dhakal (2007, p. 82) views governance as a process of accelerating public affairs in the interest of the people and also for intra/inter institutional cooperation, and institutional arrangements in policymaking, development, and service processes to pursue in collective interest. Furthermore, governance discourse seeks for integrating the common masses in the development process enhancing their capacity and increasing access to the productive resources. It also seeks people's participation and ownership in policy making process through the decentralized governance system. Governance discourse also seeks more about coordination, coherence, collaborative networks among the wide variety of actors such as public sector organizations, corporations, private organizations, civil society organization, and international organizations (Warren and Weschler, 1999, p.119).

Governance theory highlights the multivariate character of policy, considers the design and operation of policy structures and actions, and focuses on the “multi-layered structural context of rule-governed understandings, along with the role of multiple social actors in arrays of negotiation, implementation, and service delivery. For addressing the issues of effective governance, there requires attending to social partners and ideas about how to concert action among them” (O'Toole, 2000, p. 276).

Peters and Pierre (1998, pp. 232-233) opined that ‘governance is about maintaining public-sector resources under some degree of political control and developing strategies to carry on government’s capacity to act’ in the face of management tools that replace highly centralized, hierarchical structures with decentralized management environments where decisions on resource allocation and service delivery are made closer to the point of delivery. Furthermore, governance as a process sensitive to its political and cultural environment is likely to appear in different institutional forms in different national contexts.

The most influential and significant contribution to the thinking about governance has come from neo-institutionalists, notably Douglas North (1990), drawing theoretical inspiration from the rational choice tradition in the social sciences. By highlighting the human mind behind the design of institutions, the assumption has been that they can be reformed more or less at will. Public sector reform, including the task of reducing transaction cost, has been driven by this approach (Quoted in Hyden, 2011, p.3)

Good governance has been thought of consisting three components, or levels, ranging from the most to the least inclusive: systemic, political and administrative (Leftwich cited in Jain, 2009, p.3). The systemic point of view shows more than its institutional or decision making interpretation to embrace both internal and external political and economic power and the interrelationship between the two to specify the rules by which the productive and distributive life of society is governed. Political perspective of governance implies a state enjoying both legitimacy and authority derived from a democratic mandate and would normally entail a pluralist polity with representative government and commitment to protect human rights. Similarly, administrative perspective refers to efficient, open, accountable and audited public service which has the bureaucratic competence to help design and implement appropriate public policies and at the same time and independent judicial system to uphold the law.

The term governance has been used in a variety of ways in political, management and economic perspective. Furthermore, governance is an ever-ending process through which conflicting interests may be accommodated and cooperative action may be undertaken. It consists of the formal institutions and regimes empowered to enforce compliance, as well as informal arrangement that people and institutions either have agreed to perceive to be in their interest. As governance does not stress more on the structural aspects but on the functional, the governance concepts should be envisioned as the problem solving tools of the modern society.

The aforementioned review of governance demonstrates that governance encompasses various components such as effective service delivery, institutional capacity, people's participation, accountability, organizational coordination, transparency. Governance consists of the mechanism, processes and institutions, through which citizens and groups articulate their interest, exercise their legal rights, meet their obligations and mediate their differences. Similarly, governance can take both at grassroots and global levels and it consists of the activities of governments through which "commands" flow in the form of goals framed, directives issued, and policies pursued (James Rosenau, 1995). The main thrust of this study is to make use of the governance factors such as people's participation, organizational coordination, and institutional capacity for explaining the effectiveness of agriculture service delivery at grassroots or ASC level in Nepal.

2.3 Governance: Some Critical Issues

Governance has evolved both as an analytical tool and as a practical political activity. Governance in its practical application has emerged more as a supply-driven and top-down approach. Undoubtedly, governance has tied up the world in essence for betterment of polities; however, there are a number of critical issues raised for resolution.

Governance initiative assumed to 'create a more viable and culturally sensitive alternatives to previous development approaches, allowing the indigenous elements to design their own political and social mechanisms, not only the wholesale adoption of Western institutions and ideals' (Najem, 2003, p.2-3). However, it lacks cultural sensitivity as governance hardly takes into account the differences in cultural factors such as values, ethics, and power relations of non-European countries. So Jayal (2007) rightly pointed out, in trying to make project of governance more sensitivities to

particularities in the form of cultural differences, it fails to question whether cultural specificity also demands different ways of conceptualizing development.

Institutions are the structures, process and behavior which can facilitate or hinder in accepting new policies. Existing institutions in developing countries may act as barriers for transferring the concepts of governance since the well-accepted concept of governance resides on the grounds that development requires 'a particular set of institutions like a functioning market, a rational and legal type of bureaucracy, a liberal form of democracy and more generally obedience to the rule of law' (Hyden, 2011, p.9). Although some conscious efforts have been made by the donors to transfer institutional practices from the developed to developing countries for two decades, no convincing results have been derived by the donors to explain that these institutional transfers have led to higher levels of economic growth or more sustainable development (Meisel and Ould, 2008).

Most of the programs initiated in the developing world are supply driven and top down in nature. The new initiations have disregarded the deep rooted formal and institutional set ups. Instead of measuring countries in terms of how well they score on a number of indices that are drawn from the model of neo-classical economics and liberal-democratic politics, an alternative approach is now rising based on the premise that institutions already on the ground in these recipient countries can form the basis for improved governance? The challenge is institutional development from within or, as it has been labeled in the African context, “going with the grain” (Kelsall, 2008). In other words, it would be difficult to introduce new initiatives without considering the existing forma set up of recipient countries.

Hyden (2011, pp.11-12) states that the application of governance concept is context-specific. There is no single blueprint or “magic bullet” that can help improving governance. Not all countries socio economic context accept governance the same way as economics and politics evolve out of specific socio-economic and cultural legacies. For example, the governance agenda in Africa reflects the challenges associated with nation-building and state formation in ways that differ from Asia and Latin America. Two general observations can be made from this review of how context matters. The first is that governance is not a matter of managing a blueprint but rather one of learning how to react to different and changing circumstances. The second is that understanding the

contextual reality of a particular country is as significant as knowledge of how to execute a particular program. Therefore, governance is like policy making as it is 'a regular struggle over the criteria for classification, the boundaries of categories, and the definition of ideals that direct the way people behave' (Stone, 1997, p.11) and a country's social, economic and cultural environment determines whether initiatives like governance is adoptable or not.

Governance as aid conditionality has become a debatable issue as the evidence demonstrates that countries (e.g. China and Vietnam – or Singapore) with bad governance as envisioned by Western Model have a record of admirable progress than that of the countries with democratic governance. No one doubts that effective governance is necessary for development, however, as Adrian Leftwich (1995, p.5) argues that 'what matters for development is not the system of government, but the type of state, irrespective of whether is democratic or not'. Therefore, it can be inferred that governance is not only the precondition for development.

The process of assessing the quality governance by using various indicators developed by the World Bank and other institutions has been questioned for their validity. Furthermore, the measures have been criticized for lacking theory and adequate conceptualization and clarity, lack of transparency and time inconsistency. Finally, the composite measures focus on process variables rather than variables that capture how citizens perceive the governance context and outcomes in their own countries (Ivanyna and Shah, 2009). The point is that processes and institutions can lead to different governance outcomes just as dissimilar processes could yield similar outcomes. In the past couple of decades single party dominant political systems like China, Malaysia and Singapore have shown dramatic improvements in economic growth and poverty reduction, but this also true for pluralistic political systems like Brazil, Chile and India. Different institutional set-ups have produced similar developmental outcomes.

Another issue with governance in public administration is that it lacks theory and Krasner (1993) suggests that the scholars should look to international relations where regime theory constitutes the basis for understanding governance. Regimes are deliberately constructed orders at regional or global level aimed at reducing the risk of unilateral action by powerful nations. They establish shared expectations about desired behavior, governance is, then the exercise and of establishing and sustaining such

behavior. It is inferred that governance involves managing principles, norms and decision-making procedures that facilitate the maintenance of an international order.

Najem (2003, pp.2-3) states that there are some problems with grouping so many distinct areas of development and policy orientation together under one heading commonly known as governance. As the concept has been expanded to include a seemingly ever-increasing number of new ideas and sets of policies, some would contend that it has lost much of its initial distinctiveness as a development paradigm. Whereas the concept originally distinguished itself from the much maligned modernization paradigm by placing a great deal of stress on the importance of allowing different cultures to develop their own institutions and mechanisms for social reform, the broader construction of good governance is more didactic in the political and cultural spheres, and often seems to amount to little more than a wholesale endorsement of Western ideals, practices and institutions. A second problem is that, because good governance covers such a broad spectrum, different organizations and individuals have come to frame their respective interpretations of the term in divergent and potentially even contradictory ways.

From the above discussion, it can be inferred that governance is not a cure-all approach. So the governments should be clear on what governance interventions can address the local contexts by focusing on underlying variables such as level of economic development, social organization, even cultural traditions. Furthermore, 'assessments of governance should focus on identifying individual country trajectories rather than comparing countries along a single scale as has been the predominant practice to date' (Hyden, 2011, p. 7).

There has been inherent relationship between governance and decentralization as decentralization helps to promote governance. The governance as a term has divergent uses both at the micro as well as macro level. At macro level, it aims to make holistic change in the governing system so that there can be overall development of the country. At micro level, governance can help to provide effective services to its people by the use of various mechanisms both public and private. Various forms of decentralization such as authority delegation, deconcentration, and devolution help promoting governance and making effective service delivery at grassroots level. The following section explains the concept of decentralization and how it can be used in service delivery at grassroots level.

2.4 Defining Decentralization

The concept of decentralization has been variously defined. Decentralization basically explains the transfer of power and authority in the people so that they can take decision on pertinent issues related to their wellbeing which transcends from sustenance to sophisticated life. For example, Rondinelli (1981, p.57) defines decentralization as the transfer of authority to plan, make decisions and manage public functions from a higher level of government to any individual, organization or agency at a lower level. Decentralization enables people to make plans, implement them and evaluate the implementation to see whether the target has been fulfilled and what intervention are needed to materialize the goals and objectives. Similarly, Smith (1985, p.1) defines it as ‘reversing the concentration of administration at a single centre and conferring powers on local government’. Furthermore, decentralization is the direct opposite of centralization or concentration and involves delegation of power or authority from the central government to the periphery.

The United Nations defined decentralization as the ‘transfer of authority on a geographical basis, whether by deconcentration (that is delegation of authority to field agents of the same department or level of government), or by devolution of authority to local government units or special statutory bodies’ (Asibuo 1990, p.7). In management context, it refers to the transfer of state responsibilities and resources from the central government ministries and agencies in the nation’s capital to its periphery institutions in the districts with the same administrative system.

Ayee (1999, p.2) identified four forms of decentralization: political, administrative, economic and fiscal decentralization. Political decentralization involves the transfer of specific responsibilities and resource from the central government to the local communities. Administrative decentralization is the transfer of state responsibilities and resources from the central government ministries and agencies in the nation’s capital to its periphery institutions in the districts within the same administrative system. In Ayee’s definition, economic decentralization as the openness of the economy to competition rather than domination by the state institutions, whereas fiscal decentralization, which involves the transfer of financial resources from central government to local government units. Asibuo (1990, p.2) identified various forms of decentralization:- Functional Decentralization, Areal Decentralization, Devolution, Delegation and Privatization.

These forms are different approaches to decentralization, which can be distinguished primarily by the extent to which authority to plan, decide and manage is transferred from the central government to other upcountry organizations and the amount of autonomy granted to these organizations to carry out such tasks.

Decentralization basically explains the transfer of power and authority from a central authority to lower levels in a territorial hierarchy. For Chemma and Rondinelli (1983, p.18) “decentralization is the transfer of planning, decision making or administrative authority from the central government to its field organization, local administrative units, semi-autonomous and parasatal organizations, local governments, or non-governmental organization”. Furthermore, Dahal (1996, p.1) states ‘decentralization of power from the capital city to different regions, towns, and villages of the state is one of the best arts of good governance that empowers people by ensuring their participation in the development process, bridging the market inequalities between different regions and process, and structuring the progressively ordered socio-economic transformation of society as a whole’.

According to Crook and Manor (1998, pp.6-7) decentralization can take two forms, deconcentration and devolution. Deconcentration tends to extend the span of central government and to strengthen its authority down to lower levels in the political system. In other words, with deconcentration the central government is not giving up any authority; it is mainly relocating its officers at different points in the national territory. Devolution gives up control of agencies and resources to political actors and institutions at lower levels. A devolved authority is granted legal personality which shares power between central government and sub national authorities. The third is the delegation of authority. UNDP (1993, p.67) explains delegation that involves some authority and decision-making powers to local officials. But central government holds the right to overturn local decisions and can, at any time, take these powers back.

Dahal (1996) and Shrestha (1996) viewed that there are mainly two functions associated with delegation: first the transfer of some powers of the central government to the local units under the mandate of constitutional rules. Second, transfer of specified functions to the local bodies or his subordinates in order to improve the quality of services. Under delegated power, the local authorities can undertake the assigned tasks and are not allowed to make extra territorial decisions or autonomous policy making. Hence,

decentralization helps make optimal use of local resources; enables people to make plans, implement them and evaluate the implementation to see whether the target has been fulfilled and what intervention are desirable to materialize the goals and objectives.

The Constitution of Nepal 2072 has defined the concept of decentralization to mean the transfer of functions, powers and authority and has perceived local government units as beneficiaries of the decentralized functions, powers and authorities.

From the above discussions, it can be inferred that decentralization is the creation of semi-autonomous and independent local government units on which central government supposedly has little control and they are established by law and have the power to develop developmental plans and agendas and generates it own revenue for such projects. Furthermore, decentralisation helps local authorities to provide the opportunity for local people to participate in local decisions and local schemes.

2.4.1 Forms of Decentralization

Decentralization of power commonly assumes two forms: *horizontal decentralization* that “disperses power among institution at the same level” whereas *vertical decentralization* allows some of the powers of central government to be delegated downwards among the tiers of authority” (UNDP, 1993, p.66). Decentralization in the Nepalese context is not horizontal in its nature so this study explains three ways of vertical decentralization.

Deconcentration

Deconcentration can be defined as the transfer of power and function from the central level government organizations to their respective field level agencies enabling the latter to carry out their respective field level agencies their tasks efficiently and effectively (Shrestha, 1996, p. 66). Rondinelli et al. (1989, pp.6-7) define that deconcentration “merely involves the shifting of workload from central government ministry headquarters to staff located in offices outside the national capital”. For Maddick, deconcentration is “the delegation of the authority adequate for the discharge of specified function to staff of a central department, who is situated outside the headquarters” (Maddick, 1963, p. 23).

Deconcentration limits the scope of decentralization as the grassroots level organizations are deprived of taking decisions independently as “it does not allow the local units adequate freedom to make initiatives and decisions without the consent of central authority but people do not have to go to capital for every decision” (Dahal, 1996 p.11). Furthermore, deconcentration demands hierarchical relationships and gets permission and authority from the central agency for decisions and planning. Therefore, deconcentration is to be understood only in terms of deconcentrated bureaucratic arms of the central government which may not be very much helpful in strengthening grassroots governance (Rana, 2014; Khanal, 2000). However, “it is contested that a greater degree of deconcentration can be achieved through field administrative systems enjoying delegated decision-making discretion and allowing field staff to have the authority of the latitude to plan, to make decisions on routine work and to adjust the implementation of central directives to the conditions at field level within the guidelines given by the central government (Shrestha, 1996, pp.66-67).

Delegation

Delegation denotes the transfer or creation of authority to the lower tier for planning and implementing decisions on certain issues for a given period and the authority can be taken back when deemed necessary. UNDP (1993, p.67) explains delegation that “involves some authority and decision-making powers to local officials. But central government retains the right to overturn local decisions and can, at any time, take these powers back”. There are mainly two functions associated with delegation (Dahal, 1996; Shrestha, 1996): first, the transfer of some powers of the central government to the local units under the mandate of constitutional rules. Second, transfer of specified functions to the local bodies or their subordinates in order to improve the quality of services. Under delegated power, the local authorities can undertake the assigned tasks and are not allowed to make extra-territorial decisions or autonomous policy making.

Devolution

Devolution is a process of transferring full decision-making authority to local government units. It is to create and strengthen autonomous local government institutions and devolving functions and powers upon them (Shrestha, 1996, p.65; Rana, 2014). Furthermore, devolution is generally understood as the most extensive form of

decentralization, involving, creating or strengthening independent levels and units of governments through the direct assignment of decision making responsibility.

This type of devolution is politically feasible in a democratic system as it gives full autonomy to the local units of government where central government exercises no minimal or no control in the decision making process. According to Shrestha (1996), devolution strengthens governability and helps to reduce disharmony and less conflict with the central and local level governance

Local Government NGOs Partnership

Cheema and Rondinelli (1993) defined this form of decentralization as ‘devolution of authority of functions from the government to the non-government organization’. Such type of decentralization takes place when government gives certain functional responsibility to the planning, and delivering certain tasks. It can generally be in the form of contractual basis.

Privatization

Privatization is the act of reducing the role of government or increasing the role of private sector, in an activity or in the ownership of assets (Savas, 1987, p.89). Its main motive is to reduce the size and importance of the government’s business role, increase popular participation in state ownership, raise government revenues, introduce better management, efficiency, accountability and innovations and reduce the fiscal and credit pressures on financially strapped governments. It is to transfer certain functions and responsibility to the private sector so that efficiency can be achieved and government can indulge into other business.

The literature shows that the major objectives of decentralization are the authority delegation and devolution and deconcentration. This study endeavors to explain how policies, laws, regulations, and process have effected authority delegation and various mechanisms such as the existence of institutions and capacity of institutions to deliver services, ability to organize unorganized groups, and develop social worker, women and leaders from disadvantaged groups impacted on peoples’ participation for the effective agriculture service delivery at grassroots level. There is interrelationship between governance and decentralization as decentralization is one of the mechanism to materialize the objective of governance.

2.5 Review of Relevant Studies

The concept governance in modern use basically started with the economic liberalization in 1980 as Nepal received a support from the IMF in terms of creating environment for good governance (Dhungana, 2006). Shrestha (2001) supposes the issue of good governance positioned to be a central concern of development agenda of Nepal in late 1990s. This section makes a review of the available literatures relevant to the area of this study.

Jain (2009, pp.8-14) a noted scholar, in his paper, *Towards Good Governance : A South Asian Perspective*, makes an analysis of governance related issues and questions whether the west generated theory and practices of governance are applicable in the third world or not; whether the adequate consideration should be given to various indigenously developed alternatives more suited to tackle the satisfaction of people's basic needs, and the eradication of poverty and the protection of human rights. For him, for effective governance, the South Asian countries require high level of moral determination towards the common good if they are to justly serve the society by individual moral responsibility and accountability, sacrifice, compassion, justice and an honest effort to achieve the common good. He also suggests some effective strategies for bringing about governance in South Asia; adopting a normative model for efficiency, effectiveness and service quality; public private sector synergy for capacity building; transparency and accountability for the responsiveness of both the institutions and service providers, adoption of IT for smoother interface between government and citizen, and restoring moral standards in public life for performing jobs on moral grounds.

Singh (2009, pp.28-38) talking about the governance views that 'in most of the developing countries people are deprived of basic service delivery as the innovations privileged to the richer section of the society rather than the poorer. Therefore, governance should make 'accessibility, availability and affordability of public services to the ocean of people in the deprived world and innovation and pro-poor governance as the degree of their spending depends much upon the dimensions of state politics. Thus public service delivery requires to be lifted out of the instrumentalist state and be firmly placed within the participatory model backed by remedies against asymmetry and kleptocracy and innovation can drive refreshing discourses in public policy implementation'. Therefore, governance is a precondition in democratic government as

one of the basic pillars that it can assure citizens' ownership on what is delivered by the government.

Dhakal (2007) in his study on the relationship between governance and poverty reduction explains that 'governance should establish responsive linkage of government with citizens and effective public service is assessed in terms of quality with satisfaction and quality service. Governance is the linkage between the efforts and the achievement for the accomplishment of goals and objectives undertaken by the government'. Failure of governance could affect the efficiency of government, private and the civil society performances, which are critical to implement the development activities thereby addressing poverty issues more effectively.

Adhikari (2004, p. 183-184) in his book, *Democratic Governance in South Asia: Problems and Prospects*, in *South Asia in the World: Problem Solving Perspectives on Security, Sustainable Development, and Good Governance*, concludes that democracy should not be blamed for the myriad problems of governance that the region faces. On the contrary, many of the same problems can be traced to 'a lack of democratic experience or to the quality of its scope, spread and depth'. Furthermore, different countries in South Asia face different problems so the problems should not be overlooked with the same observation. For example, in Afghanistan, the only way out of the current chaos would be a firm, and adequately funded, commitment on the part of the international community to democratic nation-building, with a clear path of progress towards incremental democracy. The same holds true for Pakistan, where steady external pressure may be necessary to convince the country's military rulers that a transition to democracy would not be against their interests and that the nation, given its multi-ethnic character, would be far better off as a decentralized democracy than a centrally ruled, authoritarian entity, provided it takes determined steps, perhaps under the guidance of multilateral agencies, to strengthen its public institutions. India and Bangladesh, on the other hand, present a wholly different set of problems and prospects.

Furthermore, he opines that the question is not whether they should have democracy – it is there, it has taken root and any effort to reverse it would lead to explosive anarchy – but how to make democracy work for better governance. Happily, each country is advancing towards a more liberalized economy and decentralized polity, with India considerably further down the road than Bangladesh, given its much longer experience

with democratic politics and stronger institutional framework. During periods of transition to open market economies, however, a new set of regulatory mechanisms for the rule of law has to be developed and implemented. In the absence of the rule of law to guarantee transparency and accountability, run away freedoms can degenerate into a license to max- maximize personal gain? Burgeoning corruption, financial deceptions involving banks and stock exchanges, the emergence of mafias and growing lawlessness can result, thus threatening democracy itself. Once again, inter- national opinion should help support such transitions instead of casually dismissing democracy as irrelevant for stability with growth.

Governance is a set of institutions by which authority in a country is exercised, public policy is carried out, and public serviced are provided. Therefore, governance is described as “a process of political management, ensuring popular legitimacy, responding to problems through appropriate mechanism and strategies, remaining neutral in providing basic human rights to activities undertaken at the state level. Order, popular legitimacy and accountability of the power elites are the requirements of a modern state, where rule of law rather than of individual prevails’ (Baral, 1993, p.1). Furthermore, he highlights on problems of governance saying that in the present democratic set up are positive nationalism, centralized power structure and elite behavior, lack of institutionalization, lack of ideology, crisis of confidence and international pulls and pressure.

Neumayer (2003) in his well-argued and well researched book, *Pattern of Aid Giving: The Impact of Good Governance on Development Assistance*, explains whether all donor countries that give aid claim to do so partly on the basis of the recipient country’s quality of governance, do these claims have a real impact on the allocation of aid, are democratic, human rights respecting countries with low levels of corruption and military expenditures more likely to receive aid than other countries and do they also receive more aid than other countries? He uses econometric analysis, and examines the factors such as aggregate aid flows, aid from multilateral organizations such as the EC and the UN aid from bilateral donors such as Germany, Japan and the US as well as Arab donors that determine the patterns of aid giving in the 1990s. It was found that there was hard relation between good governance and aid recipient among the countries as donation was mostly based on population, former colonies or some kind of biasness.

Hout (2007, p. 1-9) in his study (of aid selectivity adopted by three donors: the World Bank, the Netherlands and the United States) that is built around case studies of the donors' policies, based on a review of policy documents and interviews, as well as a quantitative-empirical analysis of policy choices related to the selection of aid recipients and the allocation of aid over the recipient countries found that the emergence of the selectivity agenda has been the result of a successful 'framing' of development policy in terms of effectiveness and governance. The focus on the quality of governance and policies in developing countries represents a policy reorientation of some major bilateral and multilateral aid donors, which is politically very significant. Aid selectivity has been introduced with the explicit aim to give new legitimacy to development assistance policies that had come under attack in the 1980s and 1990s.

Panday (2001) views governance as closely associated with democracy. So governance should involve a proper understanding and articulation of what is involved in democracy in the given social and political context, and structuring and restructuring institutions in such a way that they produce the function as services anticipated. Furthermore, Nepali (2002) opines good governance calls for the democratic planning and management of development with the people for the people and, by the people, especially marginalized.

Ojha and Morin (July, 2001), in their study on *Partnership in Agricultural Extension: Lessons from Chitwan (Nepal)*, gives a picture of governance status of agriculture service delivery at grassroots level through partnerships. The study intended to assess the effectiveness of three individual extension agents (GO, NGO and PO) and four inter-sectoral collaborative extension patterns (GO+NGO, GO+PO, NGO+PO, GO+NGO+PO). Specifically, this study had the following objectives: (1) to describe the extension process employed by various extension patterns; (2) to identify effective extension patterns; and (3) to explain the factors that promote effectiveness of these patterns in extending agricultural technologies to farmers. Their study revealed the differences in the results obtained by the various agencies and patterns of collaboration. The most effective partnerships proved to be GO+PO and GO+NGO.

Furthermore, it is argued that establishing the right partnerships and strengthening them through information obtained from in-depth periodical reviews greatly enhances small farmers' access to modern and relevant sustainable agricultural technologies. Such access is necessary to increase productivity, ensure food security, and reduce poverty.

With the NGOs' strength in motivating farmers and the GO's technical expertise, POs efficiency as well as profit orientation, this partnership pattern can reach more small and marginal farmers, as both the GO's and NGOs' mandates dictate. The partner institutions continue to collaborate so long as each of them derives benefits from the partnership. The concept of committed partnerships has been explained as an effective means of extending agricultural technology.

CRDS (2007) conducted a study on the impacts of participatory extension program on technical efficiency of farmers in Nepal concludes that efficiency could not be found from various reasons. The major reason being farmers are unable to utilize maximum potentiality of technology due to their management capacity.

Basnyat (1995) stresses that government uses extension as a support service as well as a policy instrument for influencing farmer's behavior to achieve its policy goals, In designing an extension system, contact with farmers, their active role and participation and the determination of farmer's need for technology are critical.

Samriddhi (2011, p.12-13), research and educational public policy institute based in Kathmandu, Nepal in its research in the commercialization of agriculture products makes a situation analysis of agriculture situation of various countries in South and East Asia. The lower-income segment of the population engaged in subsistence agriculture needs to be provided with subsidies, infrastructures for their growth. Another segment of population engaged in agriculture would benefit more through policies aimed at commercialization of agriculture and doesn't need subsidies from the government whereas the third segment of population already engaged in commercial farming would benefit by policies conducive to industrialization of agriculture.

The research explains that for the effective governance of agriculture services delivery in Nepal, three-tier approach should be adopted to address the problems of Nepalese agriculture. The mechanisms should ensure the effective participation of private sector at different levels; it is imperative to help the farmers engaged in subsistence level farming, government should encourage a shift to high value agriculture from the current subsistence oriented agriculture, provisions of subsidies in agricultural fertilizers should be eliminated in favor of open access to private sector. Government should establish collection centers and storage houses in major market areas so that farmers can easily store their products until they get proper prices for their products, government should

provide tax concessions on import and application of machineries and technologies used in agriculture such as tractors, the remittance incomes in the rural areas of the country should be directed towards high-value agriculture.

Shrestha (December, 2012) in his article, *Effectiveness of Social Accountability in Nepal: Road for Governance*, has stated that the evidences on the governance and service delivery scenario in developing countries have demonstrated that only strengthening supply side of governance by excluding demand side of governance has not been able to produce the expected results in developing countries. As the supply side of governance is based on top down decisions, a 'deep gulf remains between service providers and service recipients' (p.51). Furthermore, supply side of governance has hindered the service delivery process, by widening a gap between what is really expected and what is achieved.

Shrestha (2009) conducted *A Baseline Survey on Perceptions (particularly Disadvantaged Group) on the quality of Public Service and Goods*, provided by the government authorities in six districts of Nepal namely Khotang, Okhaldhunga, Ramechhap, Dolkha, Jajarkot and Dailekh, shows that majority of people have very little information about the activities in terms of goods and services provided by the service delivery institutions. Regarding agriculture service delivery, more than two thirds of the respondents of all selected district put their views that they do not know exactly what agriculture offices within the district are responsible to do what and for whom they are accountable. The major reasons may be the lack awareness, process of service provision, attitude and behavior of service providers.

Prasad (2001) in his article *Emerging Challenges to Governance*, making explicit explanation of the term governance states that governance has “a wider meaning than of government, government refers to the machinery and institutional arrangements of exercising the sovereign power for serving the internal and external interest of the political community, whereas governance means the process as well as the result of authoritative decisions for the benefits of society. Furthermore, governance also refers to the forms of political system and the manner in which power is exercised in utilizing the country's economic and social resources for development (Mukopadhaya, 1998). Governance is associated with efficient, and effective administration to design, formulate and implement policies, and in general, and to discharge governments functions in a

democratic framework. Furthermore, it implies to the high level of organizational capacity of the center of power of political and administrative system to cope up with the emerging challenges of society.

Kjær (2004) in her paper, *Central Government Intervention as Obstacle to Local Participatory Governance: The Case of Uganda*, explains the importance of participatory governance as a tool of development adopted by central and local governments in developed and developing countries. She opines that 'participatory governance functions with the institutional set-up which includes citizens, both from central and local level, to participate not only in decision making but also in implementation by enhancing the efficiency of service delivery. Participatory governance also facilitates the implementation of policy decisions simply because implementing a negotiated decision is easier than implementing a decision taken unilaterally (Mann, 1996 cited in Kjær, p.1). Her paper highlights on major obstacles such as resource constraints, local strong men, patronage, abolishment of graduated tax, ensuring local staff loyal to National Resistance Movement, no-patrimonial strategies has been observed to obstruct local participation in Uganda. The central government, in fact, implements decentralization to legitimize a regime whose main project seems to have become that of staying in power. Such exercise of power to maximize the interests of the political elite is very visible and place-able to the center, which threatens the win-win assumptions of governance theory from materializing and it is very antithesis of assumptions underlying governance theory where power is shared in networks.

A study conducted by Shrestha (2004) on *Consumer Satisfaction Survey of Public Service Delivery of the Selected Services Delivered by District Level Government Offices*, of five districts of Nepal- one from each development region- assess the level of satisfaction among the service users in the service areas like health, education, agriculture, livestock, land revenue and local development. This study revealed that more than two thirds of respondents of the selected districts were either dissatisfied or neutral on the issues of availability of services, behavior of service providers, working style of services providers, knowledge of service providers about service need of people and credibility of service providers. This situation reveals how miserable status is of governance in the public institutions in providing services to the service receivers.

Armon et al., (2004) in their report *Service Delivery in Difficult Environment: The Case of Nepal* examine the challenge of maintaining services for poor in conflict affected areas of Nepal. The report describes the different approaches development partners have taken to supporting service delivery and draws attention to key issues that should be considered for future support. The report suggests that the poor or the underprivileged section of the society are suffered more by discriminatory nature of service providers and the conflict that has hindered the service delivery in the rural areas. They conclude that if the problem is to be resolved there should be downward accountability rather than upward accountability.

The review presents some critical views that affect governance in general and agricultural service delivery at grassroots level in particular. From the review it can be deduced that effectiveness of service delivery depends upon satisfaction with services, availability of services, accessibility and affordability of services. Furthermore, different factors such as participation, institutional capacity, institutional arrangements, technology, committed partnerships to a large extent affects service delivery.

2.6 Overview of Governance Efforts in Nepal

Nepal was united as an independent country in the latter part of the eighteenth century by Prithvi Narayan Shah, who ruled the small principality of Gorkha. The unification of the country was possible through the conquest of petty rulers collectively known as the Baise (twenty two) and Chaubise (twenty four) confederation of the Gandaki and Karnali region (Rose and Scholz, 1980). Later his successors expanded the country in the east of Kathmandu. The present size of the country is of consequence after a two year war with Great Britain that culminated in Saugauli Treaty in 1816.

The country was ruled under the active reign of Shah Dynasty between 1768 to 1846. During that period a minor was on the throne and the affairs of the state was run and controlled by one or the other of the several competing families of courtiers, who on behalf exercised all the executive, legislative and judiciary powers of the state. During that period, the political order was highly centralized and local governance was conducted through official representatives of the monarch with delegated administrative authority. The courtiers and other officials were concentrated in the succession of plots and conspiracies for taking the office. In 1846, Janga Bahadur Rana staged a coup through what has been known as the *Kot Massacre*, usurped all state powers, reduced the

king to the nominal head of the state and installed the rule of hereditary Prime Ministers with its own extended family for over a hundred years. The state machinery mainly existed for strengthening the personal coffers of the rulers and civil service existed at the pleasure of rulers (Shah, 1994).

The Rana regime was over in 1951 in a popular revolt and armed revolution with overt support from India which had relieved itself of the British colonial burden in 1947. The change reinstated the power of the king, permitted political parties to function. Since the new polity needed a regular administrative system, a replica model of the Indian system of bureaucracy, as devised by the Indian advisors, was adopted. It was a hierarchical system (Shrestha, 2000, p.37). This has been the origin of modern administrative and organized civil service in Nepal. It was neither the result of evolutionary process nor of any expert study. It was ad hoc (Shah, 1994).

In the mid fifties (1956) *Administrative Reorganizations and Planning Commission (ARPC)* was formed and 'it was the first native effort to introduce necessary changes in the administrative system' (Poudyal, 1989, p.77). Other governance related innovations during that period included the creation of an independent judiciary, a Public Service Commission and provision of freedom of speech and press and other fundamental rights. This can be taken as the first step for the governance initiative in Nepal.

Furthermore, the royal coup of 1960 ousted the first popularly elected government of 1959 and banned political parties, took all executive power with himself that led to the promulgation of a new constitution in 1962. The *Panchayati* system -a partyless political system- lasted for 30 years which included monarchy as the source of sovereign authority and head both of the state and government. The king took all power in his grip. The contribution of the *Panchayat* system was the creation of the Village, Town, and District Development *Panchayat* in the country. Village and Town *Panchayat* were the units to conduct the service delivery activities at the grassroots level.

The Administrative Reform Commission of 1967 and 1975 headed by ministerial level officials had been major landmarks in the Nepalese administrative system. The major recommendations included the need for performance-based evaluation system in the bureaucracy, stressed on merit rather than seniority for promotion, strengthening of planning cells in the ministries, initiation of office oriented working procedures, preparation of the organizational manual and establishment of an administrative college

(Shrestha, 2000, p.38). Furthermore, to promote governance various attempts were made with decentralization initiatives each of these initiatives⁴ had something new to contribute. Thus, decentralization in Nepal had been a cumulative process over the years with 1982 Act being the most far-reaching of all. The District *Panchayats* were devolved the authority to plan for district development. The line agencies in the district were brought under the direct control of the District *Panchayats*. The line ministries in center were required to provide timely forecasts of the resources to be allocated to the individual districts. The user groups of direct beneficiaries were made the principal institution for the planning, implementation and ongoing management of development projects at the grassroots. Later line agencies became independent from the district body and nullified the two way planning process.

Nepal experienced autocratic rule at most of the times in its history before 1990. During that period, the political order was highly centralized and local governance was conducted through official representatives of the monarch or rulers with delegated administrative authority. Although there were some efforts to make grassroots level delivery effective, to promote local governance by creating Village and Town *Panchayat* by the promulgation of Decentralization Act 1982, Nepalese people never felt of good governance during *Panchayat* rule for three decades till 1990 as there was lack of people's participation in planning, decision making and benefit sharing in both political and economic matters.

2.7 Planned Efforts for Governance after the Restoration of Democracy

The concept of good governance came to prominence by the end of the 1980's when the World Bank sponsored comprehensive study identified the poor governance as the main reason behind the dismal situation and poor economic performance in the Sub-Saharan Africa. Since then, the issue of good governance as a necessary condition for overall economic advancement evolved into being a subject of global interest. During that period, Nepal too went to a fundamental transformation in the polity from partyless

⁴Decentralization Plan of 1965, the District Administration Plan of 1974, the Integrated Panchayat Development Design of 1978, the creation of the Ministry of Local development in 1980 and the legislation of the Decentralization Act of 1982 were the major initiatives taken for improving governance.

authoritarian dispensation to the multi-party democratic order following the people's movement in 1990 (Shrestha, 2000, p.35).

The new constitution-the constitution of the kingdom of Nepal 1991 envisaged constitutional monarch at the apex of the political structure, sovereignty vested in the people, unitary government, a bicameral legislature, independent Election Commission, and guarantee of fundamental right enforceable to the court. The central issue of good governance, namely, political and bureaucratic accountability, transparency and people's participation, reliable and independent judiciary system, effective and efficient public sector management, cooperation with the civil society, unfettered exercise of human rights and freedom of expression moved to the forefront of Nepal's National agenda and debate.

The Nepal government up to the seventh plan has not explicitly expressed its concern on governance in its plan, though implicitly stated. Nepal government has made some efforts to translate the basic principles of good governance through the promulgation of *Civil Service Act 1992*, *Corruption Alleviation Act 1992*, *Local Self-Governance Act 1999*, *Public Procurement Act 2007*, *the Right to Information Act 2007*, and *Management and Operation Act 2008*. However, the implementation scenario has not been very encouraging due to a host of problems that include lack of effective implementation of legal provisions related to the operation of public services, lack of measurable standards for the objective evaluation of employee's performance, lack of transparency in decision making process, centralized decision making system, ambiguity in the allocation of responsibilities, lack of effective mechanism to discourage the irregularities and interference of non-administrative sector in administrative sector etc. are the problems prevailing in the field of good governance (Bajracharya, 2012, p.1010). The problem can be overcome by making decision process lean, prompt, fair, economic, transparent and accountable and sharing knowledge from other countries' experiences.

The issue of good governance is moving to the center stage of national development agenda in recent years. For the first time, the National Planning Commission devoted a separate chapter on Good Governance and Development Administration, in the Ninth Plan (1997-2002) which has laid down the following objectives in this regard. Firstly, it is to make the management of public affairs clean, lean, transparent, economical, competitive, job-oriented, capable, productive, service oriented and accountable;

secondly, it is to make public resource management proper and effective; and thirdly, it is to enhance the legitimacy of the system of governance and of civil societies. The plan has envisioned the result oriented service delivery system through effective management and legitimacy. However, the feel good a provision of the plan notwithstanding, the chronic problem with the national planning in Nepal has been that most such policy statements remain limited to the pages of the paper in which they are printed (Shrestha, 2001). In other words, there has been a high gap between what is articulated and what was really materialized.

In the Nepalese context, Poverty Reduction Strategy Paper for the Tenth Plan (2002-2007) gave much importance to the governance recognizing it as one of its four pillars. The plan specified two objectives behind the work for competent transparent, service oriented, result oriented, purposive and gender equity oriented public administration as improvements in the judicial administration, and to ensure human rights as indicated in the international conventions, committed in the international forums by the government, and related them with national development and poverty reduction (HMG/N, 2003, p.40).

Three-Year Interim Plan (2007/08 to 2009/10) has specified decentralization as a main means of enhancing good governance, a process of administrative, political, social, and economic and development works, and a strategy for promoting peoples' participation and people's empowerment. The following strategies are developed to improve local governance and community development to address the aforementioned challenges:

- Demand driven, targeted and community focused and specific goal-oriented schemes and social mobilization programs will be implemented to increase the access of people from remote areas, women, children, Dalits, Adibasi, Janjatis, Madheshis, Muslims, exploited, marginalized, minority, disadvantaged and other backward groups to resources and opportunities through their increased participation and ownership. TYIP refers to government's commitment to child participation and child friendly local governance.
- The perception of good governance through the strengthening of the local self-governance system will be developed by mobilizing internal and external resources for the local bodies and facilitating their effective utilization, as well as through capacity building, sector wide devolution and through the coordinated

efforts of other local level stakeholders.

- Human resource development plans on capacity enhancement will be prepared and implemented in the areas relevant to local development. Training sessions will be organized at local level by creating ownership of local authorities.
- Emphasis will be given to partnerships with NGOs and the private sector. All governmental, non-governmental and private sectors will be made responsible for facilitating decentralization and devolution as the major policy for central government and vehicle for the consolidation of the local authorities.
- Special attention will be given to the mobilization and sharing of revenues between local authorities so as to ensure equitable development and to help the overall development of socially and economically backward places, classes and communities. Grants to local bodies will be incorporated within the framework of minimum conditions and performance measures. The total budget allocated to local bodies and the sector-specific central budget will be adjusted scientifically.

Although the concept of governance covers the whole spectrum of services rendered by the public administration, communities, non-government social organizations, the private sector and all other sectors, it's only public administration that can make long lasting impact on the governance of any countries. The objectives of TYIP are: to support sustainable economic and social development works by ensuring good governance to the people while making the public, judicial and development administration sector accountable and sensitive towards people's needs/aspirations; to promote access to economic and social service delivery through public participation, transparency, accountability and creation of a corruption free situation by strengthening the state mechanism according to the values and tradition of the rule of law (TYIP, 2010-2012, p.455). The following strategies are developed for effective governance; control corruption by preventive and curative methods; to adopt the strategy of affirmative action; to ensure things like 'fundamental rights of the clients to receive effective and quality service by making service delivery that were provided by all the government agencies inclusive'; to provide expedient services according to public choices and needs; to develop a culture, which helps to preserve, promote and respect human rights.

Similarly, the government of Nepal in its TYIP (2010-2013) has laid sound emphasis on good governance. It has been due to the realization that without governance the

development as well as prosperity will be impossible. The TYIP acknowledges that ‘the national and international experiences prove that multi dimensional development can be moved forward in the state when people could be guaranteed for good governance by making public service delivery effective, enhancing transparency, participation, accountability, predictability and legitimacy in the operation of the state management and development affairs. Therefore, it is necessary to make service delivery effective by making necessary reforms in the administrative areas and guaranteeing the people for good governance (TYIP, 2010-2013).

In sum, Nepalese people fought for democracy and good governance for decades. As a result of the decades of struggle, it established democratic political system in 1990, with democratic constitution that raised the issues of good governance like political, bureaucratic accountability, transparency, and people participation, reliable and independent judicial system. Despite the initiatives for governance in the tenth, eleventh and twelfth plan, social inequality, social exclusion, deep-rooted poverty, unemployment, and disease, as social discrimination, lack of effective service delivery are the critical issues in Nepal.

2.8 The Policies for Promoting Governance

It is essential that government policy is consistent in confirming its commitment to equity and meeting the needs of the poor through the delivery of services at the local level. For this, Nepal government has promulgated various policies and Acts for the promotion of governance.

The constitution of Nepal, 2015 (2072) has included provisions to make the grassroots level more inclusive, self sustaining and participatory. For this various roles from fund generation to project implementation have been given to the grassroots level. The provisions are providing health, education, agriculture services, social security and poverty alleviation, protection of environment, disaster management.

Similarly, Interim Constitution of Nepal, 2063 (2007): The Interim Constitution made the following provisions for effective governance:

- Conducive environment will be created to promote people's participation at the grassroots level and create local self-reliant institutional mechanisms to provide services to the people at the local level through decentralization as an integral part of the governance.
- Interim Local Bodies at district, municipality and village level will be created as per consensus made by the political parties.
- Balanced approach will be taken in resource mobilization, allocation and equitable distribution of development results.
- Roles and responsibilities of the local bodies will be delineated to make them more accountable in planning and implementation of local level services including revenue mobilization and allocation. Special attention will be given to uplift the socially and economically backward classes and communities in revenue mobilization and allocation.

2.8.1 Local Self- Governance Act 1999

After replacing the Decentralization Act of 1982 by the DDC, VDC and Municipality Acts of 1991, the Acts had been making demands for a more substantive devolution of authority. The major pitfall of the provision was that the new DDC Act liberated the line agencies from the control of the district body and nullified the two way planning process that was evolving between the center and the districts (Shrestha, 1996, p.38). Deuba Committee recommendation in 1997 has been a landmark which involved the line agencies should be brought under the administrative control of DDC. It was strong recommendation for strengthening local planning at the district level. As a result after long discussion and debates with the various stakeholders, the High Level Decentralization Coordination Committee's report came into legislation under the rubric of Local Self- Governance Act (LSGA) 1999 which has established a solid policy and legal framework for local bodies – which is based on local bodies at the district, municipality and village levels. The only distinctive feature of the Act has been that it put together three separate local bodies' Acts of 1991 into one single volume, namely the Local Self –Governance Act 1999. A major task of the GON is to substantiate the objectives, policies and principles of the Local Self-Governance Act 1999 and to translate the principles of local self-governance into practice through the mobilization of

local bodies and local communities with the facilitation and support of the central line ministries. The LSGA provides the legal basis for the involvement of civil society organizations (CSO) in formulating plans for the local bodies (GoN, 2008 p.7). The seemingly new elements in the Act have been the possibility for the DDC's to establish their own line agencies to replace those of the government (Shrestha, 2000, p.47). However a set criteria has been laid down in the subsequent Local Self-Governance Regulations 2000 (Article 270) which permits a DDC to set up its line agency under two conditions; there must be the capacity for participatory planning and a functioning database and information management system and the proposal to withdraw government line agency from the district must be endorsed by the concerned line ministry in the center.

Due to the existing top down nature of planning, it was not easy to revamp the system. Therefore, Shrestha (2000, pp. 48-49) views that “unless government overhauls its largely ineffective planning process, the chances of the DDC's line agencies to replace those of the government in the districts would remain remote and the rest hardly amounts to anything more than the old wine in a new bottle.” There have basically been three reasons why they have been unsuccessful; the government bureaucracy lacked necessary capacities to approach the problem in a professional manner; lacked the capacity to internalize the decentralization-related lessons from several success stories in the country; and the donor's commitment to support the country for good governance without assessing the need of the country and internalizing the indigenous knowledge base. Furthermore, local bodies are becoming effective due to the implementation of Local Self-Governance Act and enhancement in the accountability of the local representative institutions, a negative effect has been observed due to the vacancy of the elected people's representatives at the local bodies as the devolution of the political, administrative and financial responsibilities to the local level has been halted for a long period which has hindered the lack of selection of and prioritize of program, participation and inclusion, while services are delivered to the people at the local level (NYP, 2007-2010, pp.253-254).

2.8.2 Governance (Management and Operation) Act, 2008

This Act underlines measures for people oriented, accountable, transparent, inclusive and participatory public administration to provide its benefits to general people, to instigate

good governance principles and norms such as rule of law, corruption less tidy administration, decentralization, fiscal discipline and public functions, skilled management of resources to create public service receiving environment, to transform civic rights to governance into practice, to make legal provision to transform administrative mechanism towards service provider and facilitator to foster realization of governance in the country.

The Act makes general provisions on operation of administration at different levels such as central, regional, zonal, district and local level with basic fundamental mandates for administrative functions and policies to be followed by government of Nepal. It spells out administrative functions and responsibility of officials at different levels such as Minister, Chief Secretary, Secretary, Department Chief and Office Chief including work procedure to be adopted during administration.

The Act specifies self-positional responsibilities of civil servants and makes mandatory provision to keep citizen charter, providing mobile services, determining service fees on the basis of social justice, participation and ownership of people, setting up of Governance Reform Unit in government agencies, conducting public hearing, managing grievances, pursuing information technology in practice, setting up monitoring and evaluation committee and submission of annual report by GON agencies.

2.9 Service Delivery at Grassroots Level in Nepal

Bhattarai (July, 2011) states that that grassroots governance is participatory, transparent, accountable, and inclusive governing system. Though local community organizations in Nepal are more transparent and accountable, disclosing how they use public funds, this practice is not widely recognized or replicated at the national level. When people engage to believe in their own power to change their lives and communities they become empowered to participate in decision-making, implementation, and oversight also requires that the state implement participatory budgeting process, public audits, public hearings, and citizen report cards. Therefore, reinventing people's role in this way – 'from users and choosers to makers and shapers' – has profound implications for how citizens come to be seen by the state. However, current governance modality in Nepal is yet to fully recognize citizens as "active players" from its conventional view of citizens only as passive recipients of public services the government doles them out (ibid).

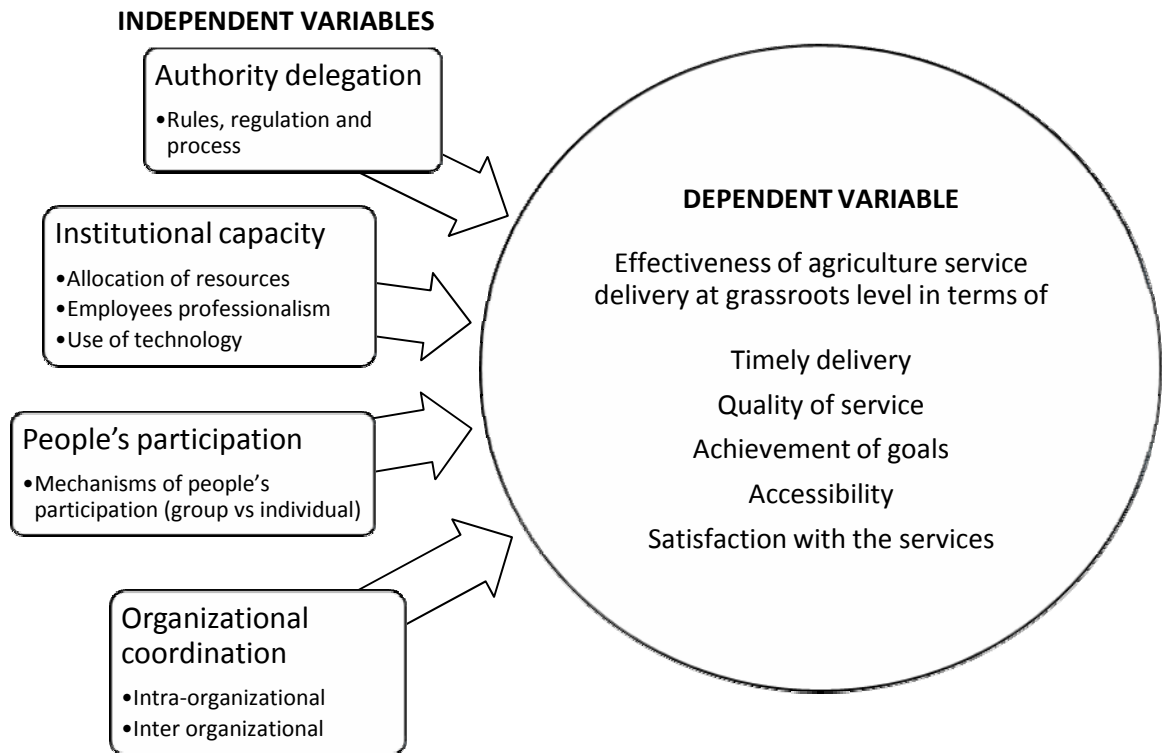
Nepal does not have very long history of formal grassroots governance. Prior to unification in 1768, different indigenous nationalities had their own homeland and self-rule under voluntary organizations which were organized on the basis of different caste and ethnic groups (Bhattachan, 2002). Furthermore, during the partyless *Panchayat* rule, the local bodies such as the Village *Panchayat* and after the re-establishment of multi-party political system in 1990 the village development committee (VDC), served as grassroots organizations and provided service delivery at the local level.

Ranges of the services that are delivered by government are economic, infrastructure building, social as well as active role in governance. Service units such as schools, hospitals, ASCs, post office are administratively and financially managed by the district level offices and they are providing services at grassroots level. As Nepal doesn't exist to have grassroots governance as such the concept of grassroots governance is being understood in terms of local governance as per regulations of LSGA (1999). Therefore, there is definitely a need to conduct more serious and intensive research about grassroots governance. So, this study has attempted to find out the factors that affect the effectiveness of agriculture service delivery at the grassroots level in Nepal.

2.10 Analytical Framework for Empirical Analysis

This study uses governance theory which has been defined as a structure, a process, a mechanism and a strategy (Kjar, 2004, Levi-Faur, 2012), as mechanism, processes and institutions (UNDP, 1997, p.2); as effectiveness-the result based and legitimacy- as right based approach to development (Hyden, 2011, p.4); as people's participation and coordination (Dhakal, 2008, pp.61-64; Dhakal and Jamil, 2008); as coordination, coherence, collaborative networks (Warren and Weschler, 1999, p.119); as the institutional capacity of public organizations to provide services effectively and efficiently World Bank (1994); as procedural matters by which institutions deliver goals (Baral, 1994, p.1); and decentralization theory which is defined as delegation of authority and participation (Cheema and Rondinelli, 1983; Dahal, 1996; UNDP (1993); Crook and Manor (1998) to explain the effectiveness of agriculture services at grassroots. This study considered some variables, which are pertinent to explain the effectiveness of agriculture service delivery at grassroots in Nepal.

Figure 2.1: Analytical Framework for the Study



Source: Developed by the author using governance and decentralization theory

2.10.1 Dependent Variables

Nachmias and Nachmias (2008, p.49) explain that ‘the variable whose changes the researcher wishes to explain is referred as dependent variable.’ The effectiveness of agriculture service delivery at grassroots is the dependent variable in this study. As the prime motive of this study is to understand and explain the effectiveness of service delivery system in the selected each one Agriculture Service Centers of *Rasuwa, Dhading* and *Bara* district, this study defines ‘effectiveness’ as the quantity of tangible outputs measured in relation to official objectives or targets, timely delivery, quality of service, as well as the satisfaction in terms of accessibility, affordability. Along with the items (e.g. demographics, attitudinal, and factual items), continuous scales (e.g. strongly agree and strongly disagree) categorical scales (e.g. yes/no, rank from the highest to lowest importance) as well as checklists are used to measure the items on the Survey questionnaire. This study has assessed the following components:

- Whether the services from the service centers are delivered in time;
- Whether the quality services are provided from the service centers;

- Whether the services provided by the service centers are according to set goals to meet the demand of the people;
- Whether the services are able to satisfy the target population in terms of accessibility ; and
- Whether the services satisfy the service receivers need.

2.10.2 Independent Variables

Independent variables are various structural factors that influence dependent variables. They are what the researcher thinks explains the change in the dependent variable. Independent variables can be controlled, chosen and manipulated (Creswell, 2014). Independent variables in this study are the factors which influence the dependent variable. The factors gathered from interviews and focus group discussions were analyzed by using qualitative measures. Independent variables used in this study are presented below.

2.10.2.1 Authority delegation

Authority is the legal right of person to command his subordinates and it flows from statutory provisions as well as from the superiors to subordinates by which they can complete the task given (Dahal, 1996; Shrestha, 1996). ‘The delegation of authority is the delivery by one individual to another of the right to act, to make decisions, to acquire resources and to perform other task in order to satisfy the given responsibilities’ (Rondinelli, 1983, p.18). Therefore, delegation of authority confers the power to govern subordinates to accomplish certain duties in the form of work where he or she can use innovative power to solve the problem under consideration. For the effectiveness of agriculture service delivery at the grassroots level, it is necessary that adequate authority is delegated by the policy design (rules, regulations) for accomplishing the job given appropriately. Similarly, procedural concerns may capture the observed choices over procedure (complex or simple) in terms of equal effective opportunity, a concern for symmetric information and fairness (Singh, 2009). If the delivery process is complex, and unfair, a few people will show willingness to take service from the service centers. This research investigates that the authority delegation in terms of rules, regulations, and process of service delivery determines the effectiveness of agriculture service delivery.

2.10.2.2 Institutional capacity

Institutional capacity refers to the ability of an organization to produce the results it wants and can deliver accordingly. According to Cornell, (2002, p.8) institutional capacity has three components: institutional authority; decision-making control over assets, strategies, programs, the institutional environment; the rules and incentives set up by any society as it organizes itself in pursuit of its objectives; institutional effectiveness: essentially, administrative competence—how good is the institution at actually getting things done. Furthermore, Singh (2009) in her study claims that institutional capacity depends upon the availability of human and physical resources and its allocation to execute the services successfully. Institutional capacity also depends upon the professionals who are able to execute programs or services effectively due to their knowledge, experience, training, innovative quality and ability to use information technology (Jain, 2009). As institutional capacity is inherent part of effective agriculture service delivery, it was measured in terms of resources that include appropriately trained, capable and qualified personnel (in terms of availability number, expertise and experience), funding, equipment, information technology and time to devote to perform the activities.

2.10.2.3 Peoples participation

People's participation 'is a process by which people exercise their voice through new forms of deliberation, consultation and/or mobilization designed to inform and to influence larger institutions and policies by being engaged in the decisions and processes which affect their lives' (Gaventa, 2002, pp. 1-2). Participation is a process of involving people mentally and emotionally for the achievement of group goals which may be shared individually or collectively. Furthermore, public participation demands the involvement of affected public from raising voice of their demands to participation in decision making (Dhakal, 2012, p.3-4). Therefore, public participation denotes that people's participation will influence the decision. Public participation helps to identify the felt needs of the people, empower disadvantaged groups, integrate indigenous knowledge system into project design, provides learning opportunity between the program and local people (p.4). Furthermore, people's participation denotes the engagement of people for affecting the issues of institutional change (UNDP, 2002). People's participation in this study is measured on the basis of the existing institutions'

capacity to deliver, organize unorganized groups, and develop social worker, leaders from women and disadvantaged groups; and the participation of people in setting targets, making choice, and review the strengths and weaknesses of the services delivered. As the ASCs are providing services to the farmers, it is essential to decipher that people's active involvement determines the effectiveness of agriculture service delivery at the grassroots level.

2.10.2.4 Organizational coordination

Organisational coordination plays a significant role in the service delivery as it helps to understand the various processes in which people are served (Jamil, 2014). Further, Verhoest and Bouckaert (2005) state that inter-organizational coordination is more network-based, while intra-organizational coordination is more hierarchy-based (cited in Christensen and Lægreid, 2008, p.102). As the government has established various organizations such as health centers and health posts, post office, schools, police posts for security purposes for service delivery at grassroots level, this study has attempted to decipher and measure what kinds of coordination exist between ASCs and the different organizations which are responsible for the host of public services; what is the nature of such relationships and how are they mobilized to coordinate and smoothen service delivery activities; is there any formal coordination mechanism or is coordination merely ad-hoc and contingent on the demands of each particular situation. This study tries to explain that the effectiveness of organization depends upon their coordination as their collective efforts of various organizations can make the delivery of services available, accessible and affordable.

2.11 Research Hypotheses

In the study, the following hypotheses were framed.

- H1: Higher the delegation of authority, more effective service delivery.
- H2: Higher the institutional capacity, better the agriculture services.
- H3: People's participation determines quality of service, achievement of goals and accessibility of agriculture services.
- H4: Higher the organizational coordination, better the service delivery.

2.12 Conclusion

Governance at the grassroots level is not a new phenomenon as it was practiced from before Nepalese unification, although it could not be successful due to hierarchical structure of governance. This chapter has elaborately explained the theoretical concepts of governance, its origin and the issues. It is found that no single definition of governance is possible as the concept has various theoretical base. Similarly, this chapter explores the various governance efforts that have taken place after 1990s. Furthermore, the concepts of governance have been applied in developing the conceptual framework for the empirical study.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The objective of this chapter is to describe research design, methodological approach applied to analyze and explore the effectiveness of agriculture service delivery at grassroots level in Nepal. To decipher the nature of the problem and make an inquiry into the research questions, this study used both qualitative and quantitative data. The primary data was obtained direct from the service providers and the service receivers through different methods of investigation such as questionnaire, interview, and group discussions. The secondary data was collected from journals, published and unpublished information sources available in different libraries, information and documentation centers of governmental and non-governmental organizations, Acts, rules, regulations, periodic plans, guidelines, operational plans, reports, publications, periodic reviews.

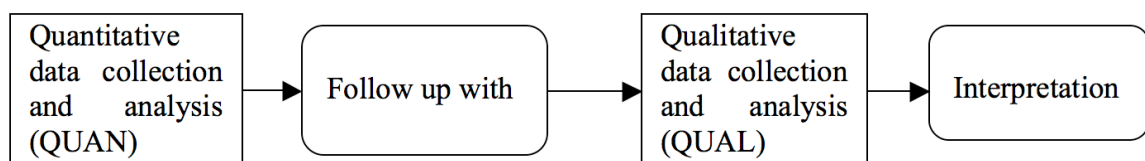
3.1 Research Methodology and Design

In order to analyse the factors affecting effectiveness of agriculture service delivery at grassroots level in Nepal, this study adopted a ‘mixed-method design’, which combined both quantitative and qualitative methods. This approach is alternatively explained as synthesis, integration, mixed methodology or multi-method approach by the researchers who wish either to confirm findings using different methods or to use a range of methods in order to provide a more comprehensive picture of the research problem (Bryman, 2006; Creswell, 2014, p.217). Due to the limitations of both qualitative and quantitative methods, the mixed method involves the use of both approaches in tandem so that the overall strength of a study becomes greater than either qualitative or quantitative research. In other words, mixed methods recognize the applicability and suitability of different methods in exploring divergent aspects of research problem.

The design used in this study has addressed the explanatory (the ‘why’ and ‘how’) and descriptive (the ‘what’) research questions. It involves testing theories or constructs using a quantitative method followed up with a qualitative method in which detailed exploration is undertaken with a few cases or individuals. This contrasts with the sequential exploratory strategy whereby quantitative data and results are used to assist in the interpretation of qualitative findings. The explanatory model is more useful for explaining and interpreting relationships of variables, whereas, the exploratory model is more suitable for studies where the main aim is to explore a particular phenomenon, for example to test elements in an emergent theory resulting from the qualitative phase (Creswell, 2014; Gary et al. 1994).

This study has employed the explanatory sequential mixed methods design which has two main components of data collection; one component following the other. Firstly, a fixed response questionnaire (e.g. a questionnaire-survey) is administered to the service receivers for mapping the effectiveness of agriculture service delivery at grassroots level. The data collected through this method by using Likert and checklists is quantitative in nature. Secondly, semi-structured interviews is conducted with service providers from the ASCs, districts and the service receivers from the service delivery points to obtain rich detail or ‘thick descriptions’ so that the researcher could decipher if there was any discrepancies in the information. Similarly, the interview phase is also involved a smaller number of interviews with the central level bureaucrats who were responsible link for coordinating agriculture service delivery. The main objective of the latter interviews was to gather information and investigate the effectiveness of agriculture service delivery. Furthermore, three focus group discussions (FGDs) in three ASCs further has helped to gather information to find out the effectiveness of agriculture service delivery. The semi-structured interview and FGDs was crucial to deciphering the factors affecting agriculture service delivery. The data collection method in sequential explanatory designs is illustrated below.

Figure 3.1 Sequential Explanatory Designs



Source: Adopted from Creswell (2014, p.220)

3.1.1 Case Study Method and Units of Analysis

The case study method is identified as ‘an empirical inquiry, which investigates a contemporary phenomenon within its real-life setting when the boundary between the phenomena and the context may not be clearly evident’ (Yin, 2014, p.2). Furthermore, the case study method provides an opportunity to use different sources of evidence. A case can be an individual, group, institution, country, event, activity or process (Nachmias and Nachimias, 2008, p.47). This study has used holistic multiple case-designs as to examine the effectiveness of agriculture service delivery at grassroots level in Nepal.

Selection of units of analysis

For selecting the units, this study has applied multistage sampling method as to deciphering the effectiveness of agriculture service delivery centres. Out of five development regions, Central Development Region (CDR) has been selected by using purposive sampling method as there are more service centres as compared to the other development regions⁵.

Selected districts for study

The main objective of selecting the CDR is to make the study more representative. After selecting the region, three districts *Dhading* from the hilly area, *Rasuwa* from the mountain, and *Bara* from the *Terai* or plain are selected by using stratified random sampling method. Similarly, *Prasauni* service centre of *Bara* district, *Naubise* of *Dhading* district and *Betrabati* of *Rasuwa* district have been selected with random sampling method for the research purpose so that the selection of Agriculture Service Centres (ASCs) could be unbiased. The core rationale of selecting the three service centres from the three districts of CDR was to explore if there was any variation in the effectiveness of agriculture service delivery in the three different geographical and ecological regions despite the delivery institutions, process, mechanism, the service delivery provision of service centres is the same.

⁵Nepal is divided administratively into five development regions, 14 zones, 75 districts, 927 Ilakas and 3915 VDCs. Out of 378 ASCs, there are 80 ASCs in Eastern Development Region, 94 in Central Development Region, and 86 in Western Development Region, 74 in Mid-Western Development Region and 44 in Far Western Development Region.

3.1.2 Brief Profile of the Study District

Nepal is a multiethnic, multilingual, multi religious and multicultural country, which is administratively, divided into five development regions, 14 zones and 75 districts, 927 Ilakas (Areas), 159 municipalities and 3157 Village Development Committees (VDCs). Divergent services such as education, health, agriculture, communication, livestock has been provided by the various grassroots organizations such as school, post office, ASCs, hospitals. There are 378 ASCs for delivering agriculture service at the grassroots level. This study selected three districts out of 75 districts, namely Bara, Rasuwa and Dhading⁶ for deciphering the effectiveness of agriculture service delivery at the grassroots level (Map of selected district for study is in Appendix VI). Since the study is based on comparative case study method, a brief profile of Dhading, Rasuwa and Bara district is presented.

Table 3.1 Profile of Dhading, Rasuwa and Bara

Description	Dhading	Rasuwa	Bara
Area in Sq.Km	1926	1544	1190
Total Population	336067	43300	687708
Male	157834	21475	351244
Female	178233	21825	336464
Average Household size	4.55	4.43	6.33
Population Density per sq. km	174.5	28	578
Population Involved in Agriculture	65.5	70%	72.89
Agriculture Service Facilities			
Agriculture Service Centers	6	4	4
Agro Vets	12	6	10
NGO's/INGO's	3	5	7

Source: CBS, 2011 and District Profile of Dhading, Bara and Rasuwa, 2072

Dhading district lies in the Bagmati zone of Central Development Region of Nepal. It is bordered by Rasuwa, Nuwakot, and Kathmandu districts in the east, Makwanpur and Chitwan in the South, Gorkha in the west. In the northern side, the district is also connected to Tibet border of the People's Republic of China. The district covers an area of 1926 square kilometer within latitude 27°40'' N to 28°17''N and longitude 80°17''E to 84°35'' to 85° E (CBS, 2011). The shape of the district is like a military boot and

⁶ These three districts of Central Development Region were selected for this study since there are more ASCs and ecological variations.

represents different agro-climate zone comprising of river valleys, flat land to middle and high hills. The climate of the district varies due to niche and physical alleviation. Subtropical, temperate to alpine climatic conditions are common in the district. According to the national census 2011 projection, the total population of the district is 336067 comprising 157834 male and 178233 females. Almost 65.5 % of the population is involved in agriculture farming. Besides, small scale livestock is the main source of occupation and livelihood of the majority of population.

Trishuli and Budhi Gandaki and Aankhu Khola are the main rivers of Dhading. The main languages spoken in Dhading are Nepali and Tamang. The people grow wheat, corn, millet, green vegetables (cauliflower, tomato, banana (raw), beetroot, bitter gourd, bottle gourd, brinjal, cabbage, carrot, cauliflower, chilli (green), chilli (dry red), cucumber, potato and so on.

Rasuwa district is situated in Central Development Region of Nepal. It covers an area of 1544 square kilometer within latitude 27°2' N to 27°10'N and longitude 85° to 85°50'E. The district, with Dhunchhe as its headquarter has a population of 43300. Out of them 21475 are males and 21825 are females. It is surrounded by Sindhupalchok to the east, Dhading to the west, Nuwakot to the South and autonomous Tibetan Region of China to the North. The average household size of this district is 4.43. This less densely populated district where about people can be found per square kilometer *Rasuwa* lies at a height of about (600m. to 7234 m. from the sea level. The people grow wheat, corn, millet, karu, oat, green vegetables, cucumber, potato and so on.

Trishuli, Phalakh, Bung khola, Khahare Khola, Langtang Khola, Mailung Khola, Chilime Khola are the main rivers of *Rasuwa*. The main languages spoken in *Rasuwa* are Nepali and Tamang, Sherpa, Gurung and Newari. The other features of this district are the existence of some beautiful tourist and religious place like Gosaikunda, Langtang Himal, Ganesh Himal, Langtang National Park, Tatopani.

Bara district is located in Narayani zone of the Central Development Region of Nepal. It covers an area of 1190 square kilometer within latitude 26°51' N to 27°2' N and longitude 84°16' E . It is surrounded by Rautahat to the east, Parsa to the west, Makawanpur to the north and Champaran district of India to the south. The climate of the district is mainly tropical and subtropical. The district, with Kalaiya as its district headquarters, covers an area of 1,190 km² and has a population (2011) of 687,708

comprising 351244 males and 336464 females. Besides the agriculture farming, small scale livestock is the main source of occupation and livelihood of the majority of population.

Bakaiya, Jamuniya, Pasaha, Dudhaura and Bangari are the main rivers of Bara. The main languages spoken in Bara are Bhojpuri, Bajjika, Hindi-Urdu, Maithili, Nepali and Marwari. Simraungarh is major part of Bara district. It is historical place in Nepal, Simraungarh is famous for agriculture product in Nepal. The people grow wheat, corn, green vegetables (cauliflower, tomato, banana (raw), beetroot, bitter gourd, bottle gourd, brinjal, cabbage, carrot, cauliflower, chilli (green), chilli (dry red), Arbicoriander leaves, cucumber, potato and so on.

3.1.3 Sampling and Population of the Study

Sampling denotes to a small group of people or things taken from a larger group and used to represent the larger group. According to Flick (2011, p.77) sampling refers to ‘strategies that will assure that you have the right cases in your study and they should allow generalization from the sample to the population’. The total sample population of this study was 210 respondents of three ASCs from three districts of Nepal. There were the key informants who were directly engaged in service delivery process which was in fixed number. The officials from central, district and local offices from agricultural service were the key informants who held the office at the time of conducting the research. The service receivers for questionnaire survey were selected by employing random sampling method (e.g. from the farmers groups by lottery method) and by purposeful sampling for interview. The main object of using random sampling method is that ‘each individual in the population has an equal probability of being selected and the outcomes can be generalized’ (Creswell, 2014, p.158). Therefore, adequate flexible measures were developed to accommodate respondents from various backgrounds such as gender, ethnicity, and language for avoiding intentional bias. For obtaining the information, the researcher spent required time in each service centres to explore the respondents view on the effectiveness of agriculture service delivery. The detail of the respondents for the research is presented below:

Table 3.2 Population of Study

Categories of Respondents	Rasuwa district	Dhading district	Bara district	Total no. of respondents
<i>Central level (Interviewees)</i>				
Ministry of Agriculture and Cooperatives	-	-	-	4
Department of Agriculture	-	-	-	5
<i>Agriculture Service Center Level</i>				
Service receivers	5	5	5	15
<i>Institutional heads (Interviewees)</i>				
Local head	1	1	1	3
District head	1	1	1	3
Questionnaire for service receivers	50	50	50	150
Focus group discussions with service receivers	1x10	1x10	1x10	30
Total Respondents	67	67	67	210

3.1.4 Methods of Data Collection

Data collection is a systematic approach of gathering and measuring information on variables under study that enables a researcher to answer stated research questions, test hypotheses, and evaluate outcomes. King et al., (1994, p.51) opine that “the most important rule for all data collection is to report how the data were created and how they were processed”. Furthermore, data collection in sequential explanatory design proceeds through two phases, with rigorous quantitative sampling followed by purposeful sampling in the second with qualitative phase (Creswell, 2014, p.224). This study demanded two different types of data: primary and secondary for examining the relationship and explain the factors affecting the effectiveness of agriculture service delivery in Nepal. Primary data was collected from the respondents through questionnaire survey, interview and focus group discussion. Likewise, secondary data was collected from published and unpublished documents. The detail of data collection procedure is presented below:

3.1.4.1 Primary Data

Phase one: Questionnaire survey

The questionnaire survey was administered to the service receivers at service centre level, which was the most relevant unit of analysis to measure the effectiveness of agriculture service delivery at grassroots. The main objective of questionnaire was to

find the perception, attitude and beliefs of the service receivers on how effectively services were delivered from the service centres in terms of quality of services, timely delivery of services achievement of goals, accessibility and satisfaction with services. Questionnaire, along with the covering letter and information sheet was administered to the service receivers as per their ability to respond to provide the required information. The respondents for the questionnaire survey were decided on random sampling basis. A total of 150 questionnaires were administered to the service receivers by tick marking the option that best suits them. Piloting the questionnaire allowed the researcher to identify any questions which are subject to misinterpretation and in-depth feedback helped on improvements on individual questions.

The questions were organized under main headings, namely, institutional capacity, authority delegation, people's participation, organisational coordination as well as the relationship between central and the local authorities, perceptions of grassroots people on the effectiveness of service centres, and the relationship between the service provider and service receivers.

Survey design and analysis

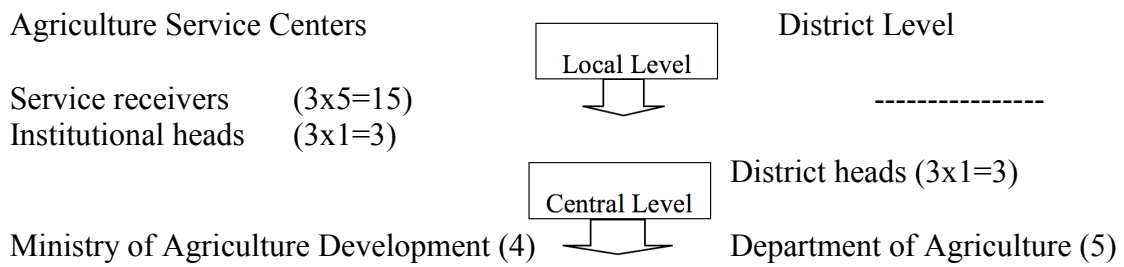
The survey measured the effectiveness of agriculture service delivery at grassroots level by deciphering the perceptions, attitudes, behaviours of service receivers. Likert scale as well as checklists was used to find out the level of effectiveness of the agriculture service delivery centres by asking questionnaire to the service receivers. The measures basically concentrated on eliciting the views on the status and effectiveness of the service delivery centres. A number of additional questions were included to elicit related institutional and individual respondent information to find the linkages of effectiveness of service centres. Although the questionnaire survey provided only a snapshot in time, it nevertheless served as a reliable and valid means of gauging the general governing pattern of service centres. It also permitted analysis of the potential impact of the different factors which affected the effective delivery of agriculture services. The questionnaire was designed with reference to existing literature on governance theory and decentralisation theory for explaining the effectiveness of agriculture services at the grassroots level

Phase Two: Interviews

Interviews were conducted with the service providers as well as service receivers of the concerned ASCs and the concerned district level and central level administrators. The inclusion of both groups provided an opportunity to see the complexities to understand the effectiveness of service delivery patterns. This approach sets this research apart from previous studies of the effectiveness of service centres as the previous studies (Sharma, 2011; Thapa, 2010) tried to present the result in isolation, mainly concentrated on the implementation status of agricultural extension services. Since the objective of this research is to examine the effectiveness of grassroots agriculture service delivery system, gathering information from divergent levels was quite crucial.

Interview was conducted with five informants who received services from each selected service centres. On the other hand, fifteen key informants, who were involved to provide services from service centres, district offices, and central offices directly or indirectly, helped to generate further explanations, understanding, and perceptions about service delivery mechanism and its effectiveness in the concerned districts. The sample incorporated 6 service providers from the concerned district, out of which 3 was from the ASCs and 3 from concerned districts. Nine key informants were selected from central level purposively to find out the interface between central and local level in terms of providing services. Interviews with central level officials from the ministries and departments were important source of knowledge for information which provided an overview of an organization and its relationship with other line agencies. They often possessed better knowledge about organizational policy and have an understanding of an organization's history and future plans. Therefore, they could bring institutional information that consists of the issues such as authority structure, institutional capacity, authority delegation, people's participation and organisational coordination. Furthermore, interviews helped to bring data that include the skills, ability, professional background, qualification as well as the receptive behaviour of the service receivers to opt for services.

Figure: 3.2: Sampling Frame for Interview



Interview Guide

The interview guide designed and developed for central, district and local level informants was semi-structured, involving specified questions but leaving open the option for further probing and asking respondents to elaborate on particular issues. Semi-structured interview was sufficiently standardized to allow interviewees to answer on their terms rather than being restricted to the frame of reference imposed by the researcher. As there were clear propositions to explore, it was important to leave sufficient room for unanticipated themes to arise.

Focus Group Discussions (FGDs)

The focus group discussion is a rapid assessment, semi-structured data gathering method in which a purposefully selected set of participants are gathered to discuss issues and concerns based on a list of themes drawn up by the researcher/facilitator (Kumar, 1987). The group discussions focus on the different experiences faced by various respondents and help to 'learn from the target audience' (Debus, 1988). There were three Focus Group Discussions (FGDs) consisting of 10 informants from each agriculture service centres. FGDs were helpful to explicate insights into target receivers' perceptions, needs, problems, belief, solutions, and reasons for certain practices concerned with analysing the factors of the effectiveness of agriculture service delivery in Nepal.

Characteristics of the Respondents

The survey involved 150 respondents, of whom, equal number of representation of males and females was made and questionnaire was administered by the researcher himself. In this study, respondents aged up to 30 years constituted 28% of the total number whereas those aged between 31- 45 consisted 44%. Similarly, the people from age group 46-60 involved 25% and the respondents aged between 61 years and above consisted only 3%.

This trend provided an indication that more middle-aged people were engaged in agriculture visited the service centre for agriculture services than the other age groups. This table also suggested that a large number of population (89%) who visited the service centre had main occupation as agriculture, followed by (6%) business, (4%) job and others such as sewing, carpentry by 1%.

Table 3.3: Characteristics of Respondents

		Service Center							
		Betrabati		Naubise		Prasauni		Total	
		N	%	N	%	N	%	N	%
Gender	Female	25	50	25	50	25	50	75	50
	Male	25	50	25	50	25	50	75	50
Age	Upto 30 yrs	16	32	9	18	18	36	43	28
	31-45 yrs	15	30	29	58	22	44	66	44
	46-60 yrs	19	38	10	20	8	16	37	25
	61 yrs and above	0	0	2	4	2	4	4	3
Occupation	Agriculture	44	88	45	90	44	88	133	89
	Business	1	2	5	10	3	6	9	6
	Job	4	8	0	0	2	4	6	4
	Other	1	2	0	0	1	2	2	1
Education	Illiterate	10	20	4	8	11	22	25	17
	Literate	23	46	11	22	16	32	50	33
	Primary level	1	2	8	16	2	4	11	7
	Lower secondary	10	20	9	18	10	20	29	19
	Higher secondary	2	4	14	28	10	20	26	18
	Bachelor level or higher	4	8	4	8	1	2	9	6
Farm size	0.05-0.25 ha	14	28	28	56	8	16	50	33
	0.30-0.50 ha	30	60	19	38	11	22	60	40
	0.55- 2.00 ha	6	12	3	6	31	62	40	27
Total		50	100	50	100	50	100	150	100

Source: Field study, 2015

The descriptive statistics in the above table further indicated that 17% people engaged in agriculture production were illiterate and 33% farmers were literate. Furthermore, the people who completed primary level was 7%, followed by 19% lower secondary level, 18% higher secondary and 6% bachelor level or higher. This figure indicated that majority of people who were either literate or had attended the schools at different levels is better than the national average of literacy as the national average of literacy is 57.4%, of which 71.1% male and 46.7% females (CBS, 2011). The major reason behind being

that only the people who had some awareness about the services provided by ASCs the visited for receiving the services.

This study found that none of the farmers who visited the ASCs were landless. The ownership of land ranges from 0.05 ha to 2.00 ha⁷. When it comes to the farm size, the larger number of farmers (40%) had 0.30-0.50 ha of land for agriculture purpose, followed by 0.05-0.25 ha of 33% respondents and those who had 0.55- 2.00 ha farm size was 27% respectively. From this data, we can infer that majority of farmers had medium size land holdings. Furthermore, the data revealed that the large size landholding (0.55- 2.00 ha) for agriculture farming was available in the *Terai* region than that in the hilly and mountain region.

3.1.4.2 Secondary Data

Secondary data does not only give information on the origin and development of policies for guiding action, but also explains the nature, process and strength of the organisation (Wolf and Pant, 2005). This study used secondary data from various sources. They included published and unpublished documents, archival records, and physical artefacts. Furthermore, for studying the factors affecting the effectiveness of agriculture service delivery at grassroots in Nepal, the agriculture policies in periodic plans, Agriculture Perspective Plan (APP) (1995-2015), National Agriculture Policy 2004, National Agriculture Extension Strategy 2007 were reviewed to make this study more authentic the reliable.

3.2 The Analysis of Data

Survey data analysis was carried out with SPSSv11.5 using descriptive statistics. The quantitative data are presented in tables, and percentages. Moreover, bivariate analysis is used to decipher the relationship between dependent and independent variables. Interview was transcribed verbatim and analyzed using a thematic approach which involved generating themes from categories and codes. Transcripts were first scanned to gain an overall experience for the data. The text was organized into tables using the

⁷According to the data calculated from 7336 households collected in 1991/92 by Central Bank of Nepal the farm size of Nepalese households is as follows: Landless/Marginal = 0.0-0.5 ha; Small = 0.5-2.0 ha and Medium/large = 2.0 ha and above. However, no farmers who visited the ASCs were found landless.

broad headings in the interview schedules. The data under headings were then systematically coded using labels which were summarized for explaining the meaning of the text. The thematic analysis was an iterative process and involved refining the coding framework as additional text was analyzed. After analyzing the results both qualitative and quantitative data was matched against each other in order to identify agreements or disagreements of the variables of the study.

3.3 Ethical Consideration

Ethical considerations are moral issues which guide an individual researcher in identifying a research problem, collecting data, analysing data and reporting, sharing and storing data (Creswell, 2014, pp.92-94). Similarly, McNabb (2010) explains four practical ethical considerations for a good research: *truthfulness, thoroughness, objectivity* and *relevance*. Ethical considerations are important as the social scientists render researches by participating human beings and their research have significant impact both on the humans and the society as a whole. The following ethical issues were taken into consideration as guidelines during my study period. Firstly, I did not disclose the identity of the respondents and officials concerned and, further, take all measures to ensure that my study does not harm any participants psychologically. Secondly, the names and addresses of the respondents were not mentioned. Prior to this, I took the respondents' consent for using the data collected and analyse the data in an unbiased way. The information obtained was kept confidential, so that the respondents felt freer to answer them honestly.

3.4 Validity and Reliability of Data

Validity and reliability play important role for the trustworthiness and credibility and authenticity of research. According to Creswell (2014, p.201) validity refers to whether the outcomes are accurate from the perspective of the researcher, the participant, or the readers. There are two types of validity; 'internal validity' is to establishing a cause effect relationship between the manipulation and behaviour in a given study; establishing that a certain observable event caused a change in behaviour. External validity denotes to generalising the study's results outside the study to other situations and participants' (Mitchell and Jolly, 2013, p.40-41). Validity is enhanced by triangulating the information obtained from various sources such as questionnaire, interview, FGDs as well as

secondary information used in this study. On the other hand reliability denotes to a condition why the result is consistent and stable if replicated. Reliability is a precondition for validity but doesn't guarantee validity, but puts a ceiling on how high validity can be (ibid.pp.161-62). There were some threats or challenges towards reliability and validity in explanatory sequential design (Creswell, 2014). Firstly, it could be difficult to decide what quantitative results to follow and what qualitative data to gather by what participants. Secondly, it was difficult in selecting the sample interviewee for the in depth interview. Thirdly, sample size might be inadequate on either quantitative or qualitative side of the study. As multiple sources of data and crosschecking through triangulation ascertained validity and reliability of research outcomes (Yin, 2014), the following steps enhanced the validity and reliability of this study. The questionnaire was pre-tested to find out the presence of any dubiety and impedance. Each and every possible respondent was contacted and interviewed to ensure that the data obtained was genuine. Furthermore, reliability and validity of the data was confirmed through cross checking method. Data collected from questionnaire survey was cross-checked with interview as well as secondary data.

3.5 Generalizability

The common concern about case studies is that they lack general applicability to the whole population or universe like experiments or survey (Yin, 2014, p.21). As the main objective of this study is to explain the factors affecting the effectiveness of agriculture service delivery at grassroots in Nepal, I extensively examined the factors such as institutional capacity, authority delegation, people's participation and organisational coordination to analyse how they influence the effective service delivery. Similarly, the information generated from the various sources of data; survey, interviews and focus group discussions, enhanced the generalisability of research conclusions. However, critiques may argue that the findings of service delivery centres may be difficult to generalize and apply to a developing country like Nepal since only three service centres from the three districts and small percentage of population is included in this study.

3.6 Problems Encountered During Data Collection

The researcher encountered various difficulties during the data collection. The discussion below outlines some of the challenges encountered during the study and how they were overcome to ensure that the quality of the field data.

The busy nature of the central bureaucrats was a major problem since they were the respondents for this research. Their busy schedules made it difficult to meet with them. Occasionally, scheduled meetings were cancelled because bureaucrats had to attend to other work related issues. To resolve this issue, I had to visit their office several times. Data gathering from the service centres was also challenging. The service centres did not have any effective information storage and some of their files with relevant information were lost.

I was unable to garner all the necessary information because some public officials did not have adequate knowledge of service provisions of Acts, policies and by laws and others considered some information to be confidential. For instance, some bureaucrats instructed me not to write or record what he was saying.

Despite the numerous challenges encountered during the research, the primary data was supplemented by secondary data in order to gain a clearer picture of the agriculture service delivery at grassroots level.

3.7 Conclusion

In order to analyze the effectiveness of agriculture service centres at grassroots level, this study has combined both quantitative and qualitative methods for collecting two different types of data. The quantitative data is collected by using structured questionnaires (N=150), which are needed to map the effectiveness of agriculture service centres in providing services. Similarly, qualitative data from Naubise, Betrabati and Prasauni ASCs is obtained through interview (N=30), and focus group discussions (N=30) to decipher the complex processes of resource allocation, service delivery, and institutional capacity. The main objective of this strategy has been to analyze subtle relationships and intricate processes involved in service delivery. This study has used sequential explanatory research design and the respondents are the people responsible for service delivery and receivers of service delivery.

CHAPTER IV

PRACTICES OF AGRICULTURE SERVICE DELIVERY IN NEPAL

The main objective of this chapter is to explain the practices of agriculture service delivery in Nepal in order to find out the effectiveness of agriculture service delivery at the grassroots level. For this, plans, policies and acts adopted for agriculture extension has been analyzed. Agriculture development initiatives had been undertaken during *Rana* regime (1851-1951) (Details presented in Appendix-IV). However, this chapter primarily focuses on the agricultural extension service delivery system from 1951, which can be broadly classified into three distinct periods according to the emphasis put on the development of the agriculture sector in conjunction with the shift in the political economy of the country.

4.1 Agricultural Development in Transition (1951-1956)

After the overthrow of the *Rana* regime in 1951, people expected sweeping changes in all aspects of their lives. The expectation resulted both from increased political consciousness and a massive social awakening. However, it was difficult to find commonly acceptable strategy of intervention though Nepal's population was predominantly engaged in agriculture. During that period, land became the basic resource and more than 95% of the population primarily depended upon it for their livelihood. There were three traditional categories of land. *Raikar*, legally vested in the crown, was in practice held by individual owners and subject to taxation. *Birtha* holdings were exempt from paying taxes to the government. *Guthi* land was also exempted from tax and endowed to temples and charities. The land was not in the hands of the farmers as tenancy was high within all three categories of land. Capital investment in agriculture was low and technology was primitive, and yields were generally poor despite the intensive application of labor (Paudel, 1986).

During that period, the government of the United States came forward to offer aid to Nepal. The US provided technical assistance in the development of the country. However, neither the Nepalese authorities, including the Department of Agriculture, nor the donor agency knew exactly what commonly acceptable strategy was available. The logical area of assistance seemed to center on rural benefits and the development of agriculture and village development strategy was chosen. Eventually, agricultural development was started from two directions (Chitrakar, 1990, p.49; Sharma, 2011, p.11; Paudel, 1986). The field-based agricultural extension program, under the banner of the Tribhuvan Village Development Program (TVDP), was administered by the Ministry of Planning and Development, while the other research-oriented agriculture program was administered by the Department of Agriculture, within the Ministry of Agriculture. The promotion of agriculture was the core component of TVDP which encompassed other social components like education, adult literacy, health and the general community development activities. However, it could not continue for long.

The Rapti valley project and small community development program in the early 1950s were modeled after a similar progress in India. In 1952, with American encouragement and advice, the decision makers and national planners conceived four point village development program to increase agricultural production through the introduction of new agricultural methods and improved inputs (Paudel, 1986, p. 3). The basic criterion of the program was that any government department wishing to undertake an activity to assist the villagers must channel their project through the village development services (Chitrakar, 1990). Furthermore, it aimed to provide adequate number of field level technicians who could disseminate modern agricultural technology among the villagers. Similarly, in 1953, it was felt that non-technical functions of the Department of Agriculture should be separated in order to accelerate the process of development. Accordingly, a separate department under the name of Village Development Department was established to function as agricultural extension, and model farms, and the department of agriculture was entrusted with research activities only. However, the agricultural development and research programs were disturbed due to the lack of directives and program coordination among the agencies concerned. This was the result of political instability in the country (Chitrakar, 1990). Furthermore, in 1955, His Majesty the late king Mahendra declared a 13-point program largely for safeguarding the peasants.

In this phase, the creation of the sections of different disciplines can be considered as an era of the beginning of research and development of agriculture and animal science in an organized way (Basnyat, 1999, pp. 2-3). Furthermore, Nepal was exposed diplomatically to the outside world; it became the member of Food and Agriculture Organization (FAO) and joined United Nations, which attracted technical as well as financial support from various other countries and institutions.

To sum up, the end of the 104-year long *Rana* regime in 1951 led to the start of bilateral assistance from donor countries. The Agricultural Extension Service was formally constituted in 1953 with the Tribhuvan Village Development Program which started in the mode of an integrated rural development initiative in which agriculture was one of the important components.

4.2 The Period Between 1956 to 1990

Systematic efforts towards national development began in the fifties with the formulation and subsequent implementation of the first five year plan in 1956 (Sharma, 2011). Similarly, the first planned agricultural development also started with the launching of the First Five Year Plan in 1956. Increased production and employment were envisioned through the development of agriculture which gave emphasis to the transfer of agricultural technologies to farmers and their dissemination. However, the supply of modern agricultural inputs and the availability of extension workers were recognized as major constraints to agricultural development. The school of agriculture was established in 1956 to train village extension workers, similar agricultural divisions in separation by the end of the first five year plan were divisions of Agronomy, Plant Pathology, Agri-engineering, Horticulture, Livestock and Veterinary Science, Entomology, Fishery, Soil Science, Dairy Development, Agricultural extension, Agriculture economics. Late in the 1960s numerous service institutions such as Agriculture Supply Corporation, Agriculture Development Bank, District Development Committee, Rehabilitation Company, and Food Corporation were established. Till 1959, four departments viz., Department of Agriculture, Department of Village Development, Department of Cooperatives and Department of Irrigation were involved directly in the agricultural development Programs. However, due to the lack of coordination in the activities of these departments, there was no effective linkage between the department of agriculture which was responsible for technological innovation, and the Department of Village

Development which was responsible for the technology diffusion through agricultural extension and distribution of inputs (Paudel, 1986, p.5).

Later in 1959, an extension function was transferred to the Department of Agriculture and was placed under the new Agriculture Extension Section. A Rural Youth (4-H) Program and Home Science activities were also initiated. Earlier, extension agents were termed as Village Development Workers who were later renamed as Junior Technicians (JTs) and Junior Technical Assistants (JTAs) —the titles they still carry to date with roles relating to the discharge of their specialized tasks relating to either agronomy, livestock, horticulture, home science and agriculture engineering after the subject specific training that was imparted to them.

Similarly, District Agriculture Development Offices (DADOs) were gradually opened in all 75 districts to provide information on improved farming techniques through the use of various extension methods including demonstrations, training, farm visits, agriculture tours, competitions, leaflets and meetings. The use of these extension methods have not changed substantially to this day. Zonal Agriculture Development Offices were later abolished and the districts became supervised by the Regional Agriculture Directorates. Frequent organizational restructuring has been the state of affairs in the agriculture sector beginning in 1966 when the Department of Agriculture was dissolved into five departments in order to remark the agricultural activities in a healthy and acute manner (Sharma, 2011). These newly established departments were: Research and Education, Fisheries, Extension and Agriculture. Furthermore, Agriculture Development Bank was established to facilitate the farmers in agriculture and help them from the high interest loan. In 1968, the School of Agriculture was upgraded to collegiate status but was transferred in 1972 to the Tribhuvan University (TU) and became known as the Institute of Agriculture and Animal Sciences (IAAS). The decades of the 1970s and 1980s witnessed the inflow of Integrated Rural Development Projects financed by bilateral and multilateral development partners covering the entire country, some with larger coverage of districts than the others. All of these had, by and large, agricultural extension components.

This period demonstrates the significant efforts made by the Nepalese governments for the development of agriculture both in the urban and rural areas. The initiatives seemed to have been undertaken mainly by the support of donor agencies. Undoubtedly, some

changes in agriculture service extension have taken place during that period. However, the efforts have not been very fruitful due to the frequent changes in the delivery mechanism which were top down in nature that seemed to have created a sense of confusion and dilemma to both the service providers and receivers. So, the result of this phase seems to have been a mixed one. The following sections make the detailed study of the agriculture intervention made by the Nepalese government after the restoration of democracy in 1990.

4.3 The Period from 1991 to the Present

Until the reestablishment of democracy in 1990 seven development plans had already been implemented and agricultural extension was primarily concerned with the transfer of advanced agricultural technologies to farmers for facilitating increased production and for improving their standards of living (Sharma and Bhandari, 2005). In 1992, the government made some changes in the structure of agriculture extension. As a cost reduction measure and for effective service delivery, all extension services were again organized through single administrative umbrella but this only lasted for a duration of just three years. Privatization had been the order of the day in the plan and having a competitive agricultural system was taken on board in regards to extension services, research, input distribution, agro-processing, and marketing (Basnyat, 1995). The role of the government was defined mainly in terms of management, quality control and monitoring. As a result, chemical fertilizer distribution was deregulated and opened to the private sector on equal footing with the government-owned Agriculture Inputs Corporation (AIC). The initial response by the private sector was encouraging but it did not last owing to policy differences embedded in neighboring India which continued subsidies for chemical fertilizers even to this day.

The border regions between India and Nepal enabled illegal inflow of subsidized fertilizers, often of inferior quality, into Nepal and the supply and use has never been smooth since deregulation. Macro-policies were not reviewed to match with agriculture policies or vice versa for open market operations. Indian agricultural policies supported heavy public sector investment along with subsidies on production inputs. But in Nepal, along with the chemical fertilizers, subsidy on shallow tube well, irrigation development was also withdrawn which slowed down the pace of irrigation infrastructure development in the Terai that was advocated for increasing food production under the

Agriculture Perspective Plan (APP) (1995-2015). Thapa (2010) viewed that withdrawal of subsidies in Nepal put Nepalese farmers in a difficult situation to compete with Indian farmers who were enjoying subsidies on different production inputs.

Government agricultural farms which had been established in different agro-ecozones at different times also had limited extension functions in their command areas in the name of outreach program in the field of specialization of each farm in agronomy, horticulture, fisheries and/or livestock. These farms were basically charged with the responsibility of producing improved seeds/breeds, saplings, fingerlings, and poultry chicks for distribution to the farmers. Training for farmers and the maintenance of mother stocks for further multiplication and breeding were also functions of the farms. While some specialized farms had significant impact on improving farmers' enterprises, linkage with the extension system was weak owing to duplication of efforts and confusion in the roles played. Public extension was seen as having poor partnership and linkages even with government partners. The Departments of Agriculture and Livestock Services are primarily responsible for advisory services for farmers and NARC has outreach research sites in some locations that facilitate or enable interaction among extensionists, farmers and researchers. The national research organization (NARC), extension services (DOA and DLS) and education (IAAS/TU) are functioning under different umbrellas, making coordination and linkage functions difficult to enable the provision of unified extension services to farmers as it does not have any such venues for interaction among the stakeholders (Basnyat, 1999).

From the above discussion it can be inferred that the efforts made in the agricultural development after 1990 has a very mixed result. It seems that the importance has been given to the private sector, by making the role of government as a facilitator has a great significance. However, it is arguable that in the country which has low level of awareness, investment, unorganized people can be served by demand-driven mechanisms rather than supply driven efforts.

The Nepalese governments have embarked development plans which have given priority for agriculture. The governments have already implemented 13 plans and fourteenth plan is in progress. The details of the efforts made in the agriculture sector in plans from 1956-2016 have been explained in the following section.

4.4 Planned Policies for Agriculture Development

As most of the Nepalese people depended heavily on agriculture for their living, planned agricultural development became a prerequisite for an increased income level of the country. Therefore, the planners thought of making efforts for the agricultural development for improving the economic situation of the people. From 1956, comprehensive plans for agricultural development with clearly stated objectives, policies and outlays have been made to meet these goals, the success of plans could neither fulfill the expectations of the planners nor the people.

The First Five Year Plan (1956-61) was launched in 1956 with broad objectives of attaining national self-sufficiency and establishing a welfare state. The specific objectives of the *first five year plan* was to increase production and provide employment opportunities, provide opportunities for an increased standard of living for all people without discrimination, create infrastructures and simple rules for implementing the plan, lay down an economic base for successive plans and to collect necessary statistics (First Five Year Plan, 1956, p.1). Furthermore, the operational policies concentrated on distributing benefits on the masses, mass participation in development, introduction of mixed economy and the use of internal and external resource, by giving top priority to the village development program⁸. The approach adopted to implement the agricultural development programs of *the first five year plan* varied from one agency to another (Chitrakar, 1990, p.53). The planning was carried out by two separate agencies, the Village Development Board under the Ministry of Planning and Development, and the departments of the allied ministries. The agricultural extension programs of the Village Development Board were based on block development approach, and the research and the other development Programs were directly implemented by the concerned departments with or without the coordination of the allied ministries.

Despite the adoption of certain institutional measures, piecemeal development of selected projects and their implementation was not going to meet the rising needs and aspirations of the people. The first plan suffered from a lack of familiarization with financial and administrative rules and regulations, inadequate and irregular reporting,

⁸Out of 330. 00 million allocated for the first development plan, 12.00 million was allocated for agriculture (First Five Year Plan, 1956, p. 15).

resulting for fulfilling minimal aspiration of the people political instability administrative aspects of implementation and public participation (Ibid. p.53-56). After the end of the first plan in July, 1961, there was a plan holiday⁹ as there was no new plan ready for implementation. After the King's take over, the newly created National Planning Council (NPC) wanted time to rethink the objectives of new programs and projects to be incorporated into the forthcoming plan.

The Second Three Year Plan (1962-65) was a leap forward in the development of Nepal as it incorporated decentralization for enhancing planned economic development. During that period, a policy of decentralization with principles of self-reliance and development was adopted (Economic Bulletin for Asia and the Far East, 1971, p.82). The major objectives of the plan were to increase the production of both agriculture and industry; build up a structure to formulate a more realistic long term plan of the future, improve the implementation capacities by increasing the people's participation through decentralization and implement the program and projects which were administratively and financially possible (Three Year Plan, 1962). Operational policies involved for the effective implementation were production oriented programs of agricultural and industry, promotion of economic stability, provide employment for the increasing population, give benefits to the masses by improved distribution measures (Three Year Plan, 1962, p. 4-5).

For implementing the agricultural development Programs of *the Second Three Year Plan*, sectoral ministries and their concerned agencies were made responsible. Accordingly, the field-oriented agricultural extension services were assigned to various institutions. With the introduction of improved production technology by the agricultural extension program and the gradual adoption of new seeds and chemical fertilizer to farmers, some changes in the production trends was noticed in the cereal and cash crops during that period (Chitrakar, 1990, p. 61). Although the plan's sectoral performances were behind schedule, measures such as the use of the agricultural extension program as an educational process, the delegation of responsibility of the concerned agencies, and inter-sectoral coordination were positive. The performance of the second plan was better

⁹ There were two plans Holiday in Nepal, one was in 2061/62 and other was in 1990/91. Both the events occurred due to the changes in the political system. One was from multiparty democracy to *Panchayat* System and the other was from *Panchayat* to multiparty system.

than the first plan as almost all the outlays envisaged in the plan, were spent and some progress was made in the country's overall economic development (Pant, 1971, p.27).

The Third Plan (1965-70) was a leap forward in the agricultural development of the country as it envisaged the motive of agricultural production, land reform and the promotion of export trade. The objectives of the plan were to increase food production, move labor out of agriculture into other productive sectors, implement a land reform program to improve the condition of the tillers, develop transportation and power to facilitate agricultural development in the hills, facilitate industrial expansion by developing agriculture and to promote export trade by developing agriculture (The Third Plan, 1965, p. 15-16). For implementing the plan various operational policies such as attempts to transfer human and capital resources from agriculture to other sectors, initiation of programs as per the ecological regions, timely availability of agriculture inputs, protection of tenancy rights, credit availability for farmers and marketing efficiency were the major interventions made for increasing productivity of the agriculture sector.

The Fourth Plan (1970-1975) targeted on raising the consumption level and generating revenue. For this the plan set the objectives as to meet rising consumption, to increase exports, to supply adequate quantities of industrial raw materials, to enhance purchasing power of the population, and to generate a capital base to allow savings, and a broader tax base (The Fourth Plan, 1970, p.36-37). For effective implementation of the program various activities such as support activities for agricultural development, provide services and facilities like seeds, fertilizer, pesticides, tools and implements at farm and village levels, solve problems of marketing and feasibility study to investigate ways to promote agro-based industries and diversify agriculture were initiated.

The Fifth Plan (1975-1980) basically focused on increasing agricultural production both quantitatively and qualitatively to meet the requirements of the growing population, initiate agricultural production based on the geo-climatic conditions of the different regions so that the national economy could be effectively integrated, develop agriculture towards meeting the needs of the agro based industries, help promote agricultural exports both quantitatively and qualitatively through diversification, provide employment opportunities for the growing population, and that labor intensive agriculture technology would be used to increase the per unit productivity of land and labor (The Fifth Plan,

1975, p.104). To fulfill the objectives various operational policies importantly coordination among forestry and irrigation were to be enhanced, effective organizational set up would be made, production incentives would be given to the farmers. There would be the commercialization of food grains as well as livestock, and the research would be problem production oriented.

The Sixth Plan (1980-1985) outlined the objectives of increasing agriculture production as a means to increase the level of consumption, provide productive employment, and increase the export of food grains to not less than 200,000 tons per year and to provide raw materials for the agro-based industries (The Sixth Plan, 1980, p.227). Priority to project selection, price incentives for farmers, integration of farming people through the implementation of rural development programs, use of improved agricultural technology, emphasis on export promoting and import reducing agriculture commodities were the major operational policies adopted for accomplishing the given objectives.

The Seventh Plan (1985-1990) emphasized on its objectives of increasing food production in meeting increasing population and consumption level, attain self-reliance by increasing the production of vegetables, fruits, fish milk and milk products, increase earnings and employment opportunities by increasing production of goods that are export oriented and import substitute and increase the production of agro-based industrial raw materials (The Seventh Plan, 1985, p.304). The operational policies of this plan basically focused on the sufficiency of agricultural products, commercialization of products, reducing subsidy gradually to the farmers, reducing the import of fruit, vegetables fish, livestock products, diversification of farming through multi-cropping as well as commercialization of commodities, availability of agricultural loans to the farmers as well as regular monitoring and evaluation would be made (The Seventh Plan, 1985, pp.304-306). To fulfill agricultural development the objectives of the different periodic plans, resource allocation were made on the basis of the global incremental capital output ratio (Chitrakar, 1990, p.68).

The Eighth Plan (1992 -1997) was implemented amidst the challenges of economic stagnation, increasing poverty; rapid population growth, structural anomalies and environmental degradation. In the beginning of the plan, the agriculture sector alone contributed 61 percent to the Gross Domestic Product (GDP) and provided 80 per cent of the employment to the work force. Hence, priority was accorded to it for agricultural

intensification and diversification to achieve food security and to create accelerated demands for labor in providing employment opportunities. The plan marked the turning point for the economy, hence true for agriculture, by forging an open market policy in its operations. The eighth plan also placed major emphasis on extension services delivery through grassroots Agriculture Service Centers¹⁰ (ASCs) together with the mobilization of leader farmers from the farmers group to undertake extension functions for expansion of extension coverage while at the same time reducing government expenditure by the public supported extension system.

During *the Ninth Plan (1997-2002)*, there was a slump in public funds earmarked for the agriculture sector as priorities shifted to education, health and infrastructure development. Agriculture in general was regarded as a private sector venture, while at the same time; the country was experiencing the decade-long armed conflict beginning in 1996. After the People's Movement II in 2006, the country entered into the era of federal democratic republic and the system of agricultural extension services delivery was bound to have a new structure.

The Tenth Plan (2002-2007) came at a situation the country was in heavy conflict situation. The long term perspective of the plan was guided by the *Agricultural Perspective Plan*, which aimed to grow the economy and raise the standard of living by reducing poverty through the increment in income and the employment, to develop additional infrastructure for commercialization and diversification of agriculture by cultivating high value crops, create conducive environment for the participation of private sector and farmers group and reduce poverty by increasing agriculture production and employment opportunities. However, this plan promised to develop some important aspects of agriculture sector. The sectoral objectives of the tenth plan basically emphasized on reducing poverty by increasing production, productivity and income in the agricultural sector and contribute to food and nutritional security, contribute to the sustainable production and growth by adoptive research and development of the technology to be used in the agriculture, protect and use agro-diversity and balance the environment by reducing pollution from the use of external inputs and develop internal market and promote export opportunities by promoting agro-based industries and

¹⁰ASCs are public extension offices located at sub-district levels. There are 378 ASCs throughout the country under DOA.

enterprises with participation of cooperative and private sector . However, the plan could not bread the expected result due to various internal and external constraints.

The Eleventh Three-Year Interim Plan (2007-2010) encompasses objectives of ensuring food security with enhanced agricultural productivity, commercialization and competitiveness, inclusive extension service delivery, conservation of agro-biodiversity and sustainable environment. The overall goal of the agriculture sector in the Three-Year Interim Plan (TYIP) of the Government was to achieve broad-based, inclusive and sustainable agricultural growth. In doing so, the objectives put for under the plan are: increased productivity, food security, competitive agriculture, inclusive development and environmental balance. Nepal's Agriculture Extension Strategy (2007) was to be implemented for efficient and effective services delivery. On technology generation and services, the plan encompassed decentralized approach to establish sovereignty of farmers in the decision making process in areas of agricultural research planning, implementation and evaluation. The integrated role of research, extension and education is recognized for improved delivery and information service provision through internet and website networks development in accessible areas. The interagency coordination through partnership and complementary roles among government, NGOs, cooperatives, community organizations and local bodies was visualized.

At the Village Development Committee (VDC) level, demand based Community Agriculture and Livestock Service Centers (CALSCs) establishment was geared towards gradual self-sustenance. Devolved extension services would receive backup support or soil testing, seed testing, plant protection, fertilizer quality test, different trainings, artificial insemination, veterinary care, and quarantine services. As inputs delivery for agricultural modernization were imperative, community resource centers would be established for agriculture and livestock development purposes (TYIP, 2007). The Three-Year Interim Plan (2007-2010) was prepared amidst the people's rising expectations, and the challenges related to agriculture and rural sector were seen as ensuring food security and alleviating poverty.

During the Twelfth Three Year Plan (2010-1013), the contribution of agriculture sector in national economy in F.Y. 2009/10 was 33.5 per cent. Therefore, it recognized agriculture as the backbone of Nepalese economy as more than 80 per cent of the total population resides in the rural area, 74 per cent of people being dependent in agriculture

and allied activities, development efforts required to be agriculture-oriented. For the development of agriculture sector, the plan emphasized on competitive production, competitive trade of agricultural produces and diversification and commercialization of agricultural trade. The plan, in its objectives focused on enhancing the contribution of agriculture sector in food and nutritional security, employment generation and poverty reduction, and trade balance by its modernization and commercialization through consideration of agriculture sector as the backbone of national economy; and improving economic status of rural people by increasing the production and productivity of agriculture and livestock commodities as per the requirements of farmers and other stakeholders.

The plan also outlined the strategies for concerted efforts towards ensuring food and nutritional requirements by enhancing agriculture productivity through commercialization of agriculture and livestock commodities and development of rural infrastructure, enhancing competitive capacity by making easy availability of improved livestock breed and reducing the cost of livestock production and products, make effective quality control, monitoring and regulation of food agriculture and livestock commodities /products, develop and disseminate climate change adaptation technology through the conservation, promotion and utilization of agricultural biodiversity, encourage organic agriculture, coordinate agricultural research, extension and education encourage contract farming and cooperative farming, develop and extend the agriculture and livestock markets. For effective implementation, implementation arrangements promised to make contemporary changes on existing rules, regulations, policies, strategies and directives of agriculture sector. Chemical fertilizers and other acts were formulated and implemented. In line with the commitments made in national, regional and international level, agriculture, livestock and food quarantine, disease control, vaccine production and quality control laboratories were to be strengthened. Institutional restructuring and capacity enhancement of the ministry and agencies under it would be undertaken.

Similarly, ministries and departments and other agencies related with Agriculture Perspective Plan (APP) would perform in a coordinated way. For this, an inter-ministerial co-ordination mechanism would be established in the National Planning Commission. At the national level, a mechanism would be developed for creating harmony and co-ordination among food and nutrition related programs. National Food

and Nutrition Security Action Plan would be formulated and support would be provided for effective implementation with clear cut inter-agency responsibility and terms of reference. Co-operative organizations would be encouraged for sales and distribution of production materials in remote districts. These seemed to be high promise for agricultural development. The plan stated as to what could be done to develop the agricultural sector, but it did not explain the practical process for doing so. Undoubtedly, this plan had given impetus to the people for diversifying and commercializing the agro-commodities, however, it might have fallen short of expectation due to unstable political situation of the country and lack of incentives by the government in attracting youths to the agriculture sector.

The Thirteenth Three Year Plan (2013–2016) was aimed at attaining the millennium development goals (MDGs) and other development commitments and to upgrade the status of the country from its current least-developed status to that of a developing nation within the next decade. This plan primarily emphasized on increasing the production and productivity of crops and livestock products, making crops and livestock products competitive and commercial, developing and disseminating environment-friendly agro-technologies to minimize the adverse impacts of climate change, and conserving, promoting and utilizing agro-biodiversity. Furthermore, this plan focused on ensuring food security, increasing competitiveness, encouraging farmers to produce low-volume, high value commodities, encouraging youths to take up commercial farming and fostering inter-agency coordination for enhancing productivity.

The contribution of the agriculture sector in the national economy in the Thirteenth Plan was expected to be 4.5 %, but the progress was only 2.22%. It demonstrates that there is a wide gap between the setting of goals and the progress achieved so far. The main reasons cited for this dismal performance were price hikes and the inadequate supply of food and foodstuffs in the international markets; the shortage of agricultural labor due to the rise in the emigration of the economically active population, youths in particular; the use of fertile agricultural land for non-agricultural purposes; and the adverse impact of climate change. Other problems included the inadequate supply of agricultural inputs; the insufficiency of rural and physical infrastructure; small, fragmented plots; unscientific land use, the lack of readily available technical know how; the lack of markets; the low price of products, limited product diversification; inability to compete; the absence of a market-oriented vision; insufficient knowledge about the safe use of

pesticides and veterinary medicines; inadequate adoption of technologies developed from research; and weak tripartite relationships among research, education and extension (TYP, 2016-2019).

4.5 State of Agriculture Service Delivery

The objectives laid down in the periodic plans are the policy goals set by the government to be realized in a given period of time. The objectives which are designed by the decision makers, planners, administrators and people's representatives demonstrate the hopes, aspiration, attitudes and thinking for the overall national development. As agriculture is the mainstay of Nepal, its development largely depends on the development of agriculture. The objectives, policies as well as the budget allocation trend demonstrate that agriculture has received a major emphasis in all the periodic plans. The objectives incorporated in the periodic plans were to increase national income and per capita income, to speed up industrialization, to distribute income more evenly, to cater to the minimum needs, to transform the subsistence economy into a monetary or market economy, to create employment opportunities, to improve nutrition, to reduce regional disparity, to diversify export trade and improve the balance of payments. Almost all of these plan objectives depend on the growth of the agriculture sector. However, there are discrepancies in the objectives stated in the plan. For example, the seventh plan states on increasing production for consumption, but it does not explain how production can really be increased. Therefore, Chitrakar (1990, p.71-76) rightly observes that 'agricultural objectives in the plan are carefully written but not clearly defined, effectively translated into operational programs especially in quantitative terms'. Likewise, the plan outlays were calculated on a planning model-based on incremental capital output ratio) whose performances has not been matched with expectations. Furthermore, plans tried to involve the people in formulating and implementing the plans, however the process has remained a centralized one.

The main challenges to attaining the expected outcome in the agriculture sector are price hikes and the inadequate supply of food and foodstuffs in international markets; the shortage of agricultural labor due to the rise in the emigration of the economically active population, youths in particular; the use of fertile agricultural land for non-agricultural purposes; and the adverse impact of climate change. Other problems include the inadequate supply of agricultural inputs, inefficiency of rural infrastructure, small

fragmented plots; unscientific use of land, the lack of readily available technical knowhow; the lack of markets; the low price of products, limited product diversification; inability to compete; the absence of a market-oriented vision; insufficient knowledge about the use of pesticides and veterinary medicines; inadequate adoption of technologies developed from research; and weak tripartite relationships among research, education and extension (An Approach Paper to Thirteenth Plan 2013-2016, p.53).

In short, while observing the objectives stated for each periodic plan, there is more similarities than the differences. There can be four reasons behind it. Firstly, the plans were developed on an ad hoc incremental basis. Secondly, the target of the plans was too ambitious enough to materialize so they were to be continued in the next plans as well. Thirdly, there was a gap between budget estimates and the actual expenditure incurred within the agriculture sub-sector. The next point is that most of the programs were initiated from outside not as homegrown remedies. Some programs were initiated on the advice of USA and some others from other countries, which had donated for the program.

4.6 Policies for Agriculture Service Delivery at Grassroots in Nepal

Agriculture is the mainstay of around 80% of the total population and it could be as high as 95% of people who reside in rural areas. Almost 85% of the total population resides in the rural areas and they are involved in agricultural activities for their livelihood. Considering the fact all the development plans have given priority for the development of agriculture sector. Nepal did not have very specific agricultural policies and plans up to early 1990s. It was only after mid-1990s that the Nepalese government came up with a specific agricultural plan namely Agriculture Perspective Plan (APP) (1995-2015) which has the twin objectives of poverty reduction and sustainable agricultural growth with multiplier effect on non-agriculture sector. National Agricultural Policy 2004 which borrows from APP and National Agricultural Extension Strategy 2007 outlines the implementation mechanism to achieve the goals set by the foregoing policies. This section reviews the policies adopted by the Nepalese governments after 1990.

4.6.1 Agriculture Perspective Plan (APP) (1995-2015)

From the eighth plan, a 20 year agricultural perspective plan (APP) is the main guideline or directory of agriculture development program of the country. The Agriculture Perspective Plan was published by the Agricultural Projects Services Centre (APROSC) in 1995, represents a comprehensive attempt to map a twenty year future for the Nepalese people. The plan covered the period of 1995-2015. The preparation of the APP was funded by the new democratically elected Government of Nepal and the Asian Development Bank. The APP was researched by numerous national and international consultants working to high level working parties and it was perceived as the centre of the national development strategy.

The underlying objective of the APP was to diversify and commercialize agriculture by accelerating cereal production in Terai (southern plain land), and horticulture, high value crops and livestock by developing pocket agricultural growth, increase factor productivity; commercializing and diversifying agricultural production, and developing both short term and long term strategies to alleviate poverty and achieve significant improvement in the standard of living through accelerated growth and expanded employment opportunities (Agriculture Projects Services Center 1995, pp3-4). APP included agricultural programs such as development of cooperative societies, agricultural and rural credit, poverty alleviation such as development of cooperative societies, poverty alleviation credit, female farmer development, small farmer development and these projects directly implemented poverty alleviation efforts.

Although the APP aimed to break with past trends, primarily through increased investment in irrigation, fertilizers, research and motorable roads and emphasized on the dynamics of the private sector and market forces. Cameron (2009, pp.11-14) observes the following shortcomings of APP. Firstly, the APP takes no responsibility for explicit initiatives to improve market outcomes for those with weak livelihood circumstances as it fails to have systematic efforts to place new assets and common property resources in the hands of vulnerable and poorest groups of the society. Secondly, the APP does make references to the need for cooperation over the use of forest and surface irrigation schemes in the hills and it does not address the challenge of group formation among the livelihood vulnerable. Thirdly, the APP neglects the migration issue which can be a positive means of gaining greater food security for many households as pastoral practices

require seasonal migrations and Trans-Himalayan trade pilgrimages have been significant features of economic and social life. Finally, the APP does not address the need for a perspective on children and the elderly. Although the need for food security targeting on children is hinted at in the APP but using schools for this purpose must accept that effective school attendance in Nepal is still at globally very low rates, tending to be squeezed by the requirements of immediate economic activity. Moreover, experiments in directly reaching women, children and the vulnerable elderly, possibly associated with a sensitive population policy, could also have been included in the food security section of the APP.

Cameron (2009, p.4) viewed that ‘the APP failed to grasp the nature of livelihood inequalities in rural Nepal. There was no targeting of livelihood of the vulnerable people by economic, social, geographical or age factors. The claim had been made that the APP is a perspective on agriculture and not a comprehensive development strategy’. But as the APP document says itself, agriculture is at the centre of people's livelihoods in Nepal and the APP does accept poverty and food security as lying within its remit. The APP model would carry more conviction if the APP researchers had utilized commissioned research to test their assumptions. Instead of the aforementioned criticism, the APP has made some achievements for commercializing agriculture, participation of women and diversifying the cultivation of crops.

4.6.2 National Agricultural Policy 2004

Despite the priority accorded to agriculture under the various Nepalese Developmental Plans, the National Agricultural Policy was only formulated in 2004. This policy envisions the sustainability in agricultural production, and transformation into a commercial and competitive system from the existing subsistence farming system. Food security and poverty alleviation are the current challenges while at the same time agriculture is vital for the sustained economic growth of the country. The major objectives outlined for the agriculture sector under the policy include:

- a. Increasing production and productivity to ensure food security and alleviate poverty,
- b. Making agriculture competitive in the regional and world markets with the development of prerequisites for agricultural commercialization and diversification, and

- c. Conserving and managing natural resources for environmental sustainability (NAP, 2004).

These policy objectives are, however, difficult to achieve because associated policies do not follow corresponding reforms to complement the agricultural policies. Agricultural research focuses on varietal development with higher production potential, resistance to pests and diseases, and early maturity traits. Higher productivity does not ensure higher returns to farmers owing to low product prices and high cost of production inputs. Supply of livestock breeds, veterinary drugs and raw materials for feeds depend largely on imports from India. Indian policies on agricultural outputs and inputs have a large bearing on the profitability of farming in Nepal. Subsidy and price supports in India are still continuing while the Nepalese government deregulated inputs (especially chemical fertilizer and shallow tube wells) distribution, and minimum support price was withdrawn.

Agro-processing and products marketing have not received due priority. Quality standards and certification system development is lagging behind which constrains participation in the domestic and export markets. Thus, competitiveness in regional markets is weak. These facts slowed down the pace of commercialization as well. Natural resources management is a multi-sector endeavor, not related to the agriculture sector alone. Agricultural practices continued to pollute the soils, water and the environment as eco-friendly practices were not put to use to minimize the effects of agro-chemicals, veterinary drugs and hormones. Integrated Pest Management (IPM) was popularized only for a few crops but with limited geographical coverage.

Reasonable inclusion of women, small and marginal farmers, indigenous and ethnic groups, and disadvantaged producers in remote areas could not be materialized from the change in policy as the conventional extension system continued with the traditional work procedures. Cooperatives suffered from reduced level of public services as they were down-sized in coverage of districts. The private sector did not find it encouraging to participate in agricultural research and developmental works under the existing policy provisions.

4.6.3 Nepal Agricultural Extension Strategy 2007

Nepal Agricultural Extension Strategy (NAES) primarily outlines the mechanism to expedite the implementation envisioned by the Agriculture Perspective Plan (1995-2015) and emphasizes efficient and effective services to agricultural producers through a participatory process by enabling learning among them. The strategy focuses primarily on institutional pluralism, privatization and decentralization of extension services. Since the services were devolved pursuant to the Local Self-Governance Act (LSGA) 1999, it was necessary to define roles and responsibilities of the central government and the District Development Committee (DDC). Coordination and linkages among value-chain stakeholders are weak at all levels—from district to the center. Monitoring of extension Programs by MOAC institutions was weak and there was a lack of elected local body in the district for about a decade now.

The district and village governments are run by teams of bureaucrats –who have their respective agency roles—relating to that of the central government. Under the current practice, manpower and conditional grants are provided by the central government and Program planning, budgeting, implementation, monitoring and evaluation rest with the local government. The agricultural development fund to be managed by DDC has been conceptualized in the NAES with the contributions from donors as well as from the private and public sectors. The DDC grants from the central government are seldom prioritized for the extension Programs; budget ceilings provided to DADO and DLSO are the major sources of funding extension Programs.

The public sector extension has been mandated to address the poor, small and marginal farmers, socially excluded groups, women, and areas where the private sector does not find a comparative advantage to work in targeted Programs. For agricultural commercialization, the public sector has to change its role from being a service provider to that of service management in working with agro-entrepreneurs and to provide support through the roles of facilitation, monitoring, standardization and quality control. Collaborative and partnership roles of public and private agencies are highlighted in the strategy for efficiency and effectiveness. NGO's role has been best described as being for social mobilization aspects for organizing farmers into groups and later to be federated into cooperatives.

The use of lead farmers with the provision of training for them for capacity building to disseminate information and to act as local resource persons has practical application in IPM technologies and recognizes farmer-to-farmer extension as a cost effective and relevant mechanism. Information and communication technologies has substantial role to play in disseminating information but the application in agriculture is yet to be popularized. The strategy encourages the use of electronic media through Farmers' Call Centers in rural areas that have telephone facilities. Thus far a toll-free number has been established at the Agriculture Information and Communication Center (AICC) in Kathmandu for interaction between the agricultural technicians and the farmers.

Identification of national and district priority commodities, division of districts in clusters, and targeting of special projects for poverty reduction are envisioned in the strategy. Coordination among the stakeholders is expected through a district-based committee (e.g. the District Agriculture Development Committee) participated in by all the public and private stakeholders. The overall impact of the strategy is expected to contribute to improved food security, increased income, environmental balance, inclusive agricultural development, commercialization, sustainable livelihoods, value addition and quality control of agricultural products.

Policy implications of agriculture service delivery

While analyzing the information associated with policies as well as acts, it is found that Nepalese government is attempting to make concrete changes in the agriculture service delivery through extension services. The policies have been promulgated with the objectives of poverty reduction and sustainable agricultural growth with multiplier effect on non-agriculture sector, for making the agriculture sector more competitive, service oriented, commercialized, diversified. Furthermore, efforts have been made for participation of various stakeholders such as women, youths, and underprivileged section of the society. However, the attempt has not been very fruitful since the productivity has not increased and the contribution of the agriculture has fallen down to 31.6 percent.

4.7 Decentralization of Agriculture Services Delivery System

Decentralization is the transfer of authority and responsibility to lower level of government, quasigovernment or private sector organizations for the public functions otherwise implemented by the central government. Decentralization differs, in forms and

combinations, from country to country given the specific situation of its own. Decentralization comes by desire of the central government, demand from below or compulsion of the central authority because of government constraints to provide effective services. Following the pace of development, fulfilling farmers' demands at the local level in such a varied agro ecological zones and often-rugged terrain in Nepal by the central government has become a challenge for agricultural extension services. The reasons why the central governments prefer to decentralize stems from the need to address complex situations at the local level, central level funding may not be enough to finance agricultural extension services demanded by the farmers and the grassroots farmers' participation may be better solicited through devolution (Sharma, 2011, p.40).

In this backdrop, LSGA 1999 has taken initiatives of the central government orient towards strengthening the local institutions through the enactment of legal measures like the Local Self Governance Act (LSGA). There are District Agriculture Development Offices (DADOs) in all 75 districts of the country respectively for agriculture related extension services to the agricultural producers. After the devolution of agriculture and livestock extension to the District Development Committees (DDC) according to Local Self-Governance Act 1999, the DADOs fall under the administrative purview of the DDC. However, the regional directors of the departments of MOAC are exercising administrative authorities in practice (Thapa, 2010, p.7). This conflict in the line of command creates confusion to district extension offices. This situation persists because of the absence of elected body in the DDC. The DDCs are presently headed by the Local Development Officers who are the cadres of the Ministry of Local Development (MLD). The government has devolved agricultural extension to the local bodies. The devolution of the agricultural extension to the local elected bodies, has however, created new challenges and opportunities due to the lack of clarity in the division of work (Sharma, 2011, p.20).

Thapa (2010) says that although the agriculture services are devolved to the District Development Committee, there are some issues such as enactment of legislation compatible with LSGA, commercialization of agriculture, closer working relation between farmers (producers, entrepreneurs), research and extension, the demand for agricultural information has become more pressing than ever before manpower quality in high priority areas should be developed and or managed accordingly to train manpower,

upgrade institutional set up and implement devolution through monitoring support are to be resolved for the proper functioning of the devolution of agriculture services.

4.7.1 Organizations for Agriculture Service Delivery in Nepal

There have been frequent changes in the organizational structures of agriculture extension. Sometimes there is one department and sometimes different departments. So far as the specific extension organization is concerned it stood as Agriculture Extension Section first and gradually enlarged to Directorate of Agriculture Extension and its main mandate is to facilitate the working by supplementing the operational guidelines for field extension activities to be conducted as per their technical standard (Sharma, 2011). However, after the restoration of democracy two major changes occurred in the organizational front. In 1991, first the responsibility of agricultural research was detached from the then Ministry of Agriculture (MOA) and handed over to Nepal Agricultural Research Council (NARC), an independent and autonomous research organization. Second, the Department of Agriculture (DOA) and the Department of Livestock Services (DOLS) were merged into a single Department of Agriculture Development (DOAD). But merging two departments into one could not continue for longer. Following Local Self Governance Act 1999, HMG/N since 2001/02 has devolved the agriculture extension services to District Development Committees (DDC) adding one more dimension to the ongoing reforms in the delivery aspect. All the regional and district organizations have been adjusted accordingly.

Both governmental and nongovernmental organizations are catering agriculture services to the farming community at grassroots level. The non government organization providing agriculture services are private organizations (POs), International Nongovernmental organizations (I-NGOs) as well as Community Based Organizations (CBOs). The Ministry of Agriculture Development is the central apex body of Government of Nepal to look after the agriculture and allied fields. It bears overall responsibility for the growth and development of agriculture sector. The Ministry consists of five divisions, two centers, one research and development fund, two departments, five projects and autonomous body of one research council, one corporation, one development boards, two companies & few development committees. Likewise, government organizations providing agriculture services at grass-root level are the Agricultural Service Centers (ASCs) and their sub centers located at particular

locations to serve assigned number of VDCs. The details of the Organizational Chart of MoAD is attached in Appendix-V.

Department of Agriculture

The Department of Agriculture bears overall responsibility for the agricultural growth and development of the agriculture sector. The agriculture sector still has got a prime role to play in the Nepalese economy and a key for the development of national economy. This sector has offered employment opportunities to 65.7 per cent of the economically active population, 31.1 percent contribution are made to the GDP and more than 50 % of its export depends on agriculture (Karki, 2015). Keeping in view of the contribution, the agriculture sector has been given priority from the onset of the periodic plans. The major objectives of the DOA are as follows:

- To increase agricultural production based on geographical specialization;
- To ensure food security through increased agricultural production and productivity in the country;
- To supply raw materials for the expansion of agro based industries;
- To provide suitable markets for agro products and to promote competitive agriculture system for increased value addition in agricultural commodities;
- To promote agro-enterprises for increased off-farm employment;
- To support import substitution and export promotion of agricultural products;
- To help in reducing poverty of marginal, small and women farmers by creating productive employment opportunities;
- To verify technology through adaptive research; and
- To maintain balance between agricultural development and environmental protection, and conservation, promotion and utilization of genetic resources.

The District Agriculture Development Office

The District Agriculture Development Office (DADO) is the only agency providing government extension services to farmers. The district office is located at the headquarters of each districts takes all responsibility in providing agriculture service to the service receivers in the districts. DADO covers the whole of District where it extends technologies relating to cereal crops, vegetables, fruits, apiculture, fisheries and sericulture to farmers' groups rather than to individual farmers. For example, they may

provide a group with demonstration materials and tell them how they should be used. The group will then decide which of its members should demonstrate the use of the materials.

After the eighth plan, a 20 years agricultural perspective plan (APP) is the main guideline or directory of agriculture development program of the country. DADO's main role is helping farmers of the district in organizing them to increase agricultural production for the betterment of their life by implementing various extension activities. The responsibility of DADO is to fulfill the objectives as follows:

- Enhance the farmers' capacity to improve the quality of their life by increasing their earnings and the purchasing power.
- To increase the productivity of food crops to meet the internal demand of the district as well as for export to food deficit areas.
- To develop employment opportunities for poor and small farmers and rural women by commercializing farming system through pocket package program (3P) strategy.
- To emphasize market led production with utilizing diversified and widespread realization of comparative advantage (APP, 1995).

Furthermore, the role of DADO in agriculture service delivery is planning and implementing various agricultural development programs in the district to support the national goal as well as improving the quality of farmers life; strengthening the coordination between other line agencies and INGOs; monitoring and evaluating the program implementation; maintaining the district profile (data and information); maintain linkages with research, input suppliers and NGOs and POs (Agricultural Directives and Norms, 2070).

Agriculture Service Centre

The Agriculture Service Centers (ASCs) are the grassroots organizations to provide the agriculture extension service that work closely with the farmers. Earlier ASCs were established and operative in almost all Ilakas of the district as the government policy was to establish all developmental and administrative service centers in each Ilaka and Junior Technicians (JT) and Junior Technical Assistants (JTA) were supposed to provide mobile extension services in the villages. After the restructuring of MoAC in 2004, the

number of ASCs has substantially reduced to Four Service Centers in Terai district and high hill district and six in hill district. This created the pressure in the ASC to cover the larger clientele. The major functions bestowed to the service centers are as follows; encourage farmers to use modern technology, solve the farmers problems, provide information to the farmers as required, help to organize farmers groups, train farmers on seasonable crops, inform farmers on district seminars and trainings, coordinate with other line agencies, provide files, pens, paper registers to the new groups, participate farmers to planning and solving problems, discharge specialized knowledge through training.

With the growing demand of the farmers and their limited number they could not provide their services efficiently (Thapa, 2010). Then the government changed its policy to station these JT/JTAs in the ASCs and provide extension service to Farmers' Groups (FG) through these stations. They have to go to the villages of farmers' field to advise whenever there is a group meeting or problem *en mass*. Although, JT/JTAs stationed in ASCs provide extension service to the farmers, collect information for management and policy formulation and also play regulatory role, the existing set up seems inadequate, so special working mechanisms need to be established to properly address the emerging issues faced by the farmers and other stakeholders involved in the system (Sharma, 2011, p.26).

The Agriculture Service Centers (ASCs) have to serve a large area often diverse in agro-ecological make up, natural resource endowments, category of farmers, and socioeconomic circumstances. Further, the political boundary of the ASC at the sub district (Ilaka) level and of the District Agriculture Development Office (DADO) at the district do not match with agro-ecological domain. This renders agricultural extension service provision even more difficult to fulfill farmers' demand for relevant, responsive and sustainable agriculture. Therefore, Sharma (2011, p.41) viewed that decentralization of agriculture services may be important for two reasons. Firstly, decentralization may bring the decision makers closer to the farmers, and farmers will be heard responsively. Secondly, decentralization has been the "excuse for escape" to avoid criticism from the local governments as agricultural extension has been always the subject of criticism at the district level, both from farmers and local leaders, and at the parliament alike for not serving the clients to affect vibrant agriculture in Nepal.

The aforesaid information on organizational structure demonstrates that there has been a sea change in the organizational structure of agriculture service delivery in Nepal. As the government has cut off the staff and the number of service centers have been reduced. The service provision is moving towards demand driven to supply driven as the services are provided from the service center as per the demand of the groups. This approach sharply differs from the previous approach adopted in which the JT/ JTAs visited the farms and suggested them accordingly. However, it is contested that the Nepalese farmers are aware enough to have the services from the agri centers in a demand driven way. It is explained elaborately in the analysis part of the research.

4.8 Issues of Agriculture Service Delivery in Nepal

Agricultural service delivery through extension in Nepal is dominated by the activities of the Department of Agriculture (DOA). Despite some improvements in the performance of public sector agricultural extension in the past, Nepalese public sector agricultural extension is often criticized for its strong technology transfer and seemingly failure to contribute to sustainable agricultural growth. Issues such as the following are often raised with regards to Nepal's public sector agricultural extension (Paudel, 2011, pp,78-81; Karki, 2015):

- Domination of supply driven approaches rather than demand driven.
- Failing to cater the needs of the specialized client and demand for location specific extension services as required by the commercialization of agriculture.
- High cost, low impact of extension programs.
- Insufficient face-to-face contact between extension worker and farmers.
- Inadequate funds for operational purpose.
- Inadequate technical qualifications of grassroots extension workers such as JTs/JTAs.
- Inefficiency of extension personnel.
- Dilution of impact by thin coverage.

MoAC's efforts to facilitate the evolution of self-standing and self-sustaining groups and their empowerment to become self-reliant and capable of articulating their needs and problems effectively have hardly matched with the resources, opportunities and capacities of the public extension system. Furthermore, the current extension system is

still out of reach of majority of people. Furthermore, the extension worker: farmer ratio is very wide.

Moreover, the following major challenges are witnessed in the governance of agriculture service delivery in Nepal (Paudel, 2011; Sharma, 2011, p.20). They are institutionalizing the participatory demand driven extension system, sustaining the institutional parallelism within the public sector agricultural extension service delivery, making extension service delivery pro-poor and inclusive, mainstreaming gender concerns in the agricultural extension services, strengthening the devolved agricultural extension systems, shifting the focus of agricultural extension system from the production to the people, from the technology to the innovation system, and from farming to livelihoods, making the public sector agricultural extension system work within the present conflict situation (conflict sensitive service delivery approach), revisiting the current agricultural extension educational methods the norms for which have been so formulated that the materials and expenditure criteria hardly differ either with the changes in the geographic diversities and physio-graphic conditions of the district nor with the nature of technology, strengthening the research, education and extension triangle and so forth, making extension efficient and effective in helping traders, producers and consumers to benefit from the WTO membership and the implementation of SAFTA.

4.9 Conclusion

This chapter provides an overview of agriculture service delivery in Nepal from the *Rana* regime to the present times. There has been some commendable efforts for the delivery of agriculture but it still lacks satisfactory progress due to top down model of implementation. After 1990s, there have been some concrete attempts to make agriculture service delivery by promulgating Acts and plans. Undoubtedly, there has been some progress in people's participation, use of new technology, dissemination of knowledge, but Nepalese agriculture development is lagging behind due to inadequate resource, lack of commercialization of agricultural products, weak monitoring system as well as lack of farmer friendly agriculture policies. Therefore, it can be concluded that instead of the heavy investment in agriculture sector, it still lacks the desired development.

CHAPTER V

EFFECTIVENESS OF AGRICULTURE SERVICE DELIVERY AT THE GRASSROOTS LEVEL IN NEPAL: AN ANALYSIS

The purpose of this chapter is to analyze the attitudes, beliefs, experiences and perceptions of service receivers on the effectiveness of agriculture service delivery at the grassroots level in Nepal. The effectiveness of agriculture service delivery is mainly explained in terms of timely delivery of services, quality of services, achievement of goals, satisfaction with services as well as accessibility of services. This chapter also presents the major problems as perceived by the service receivers as well as the suggestions for improving service delivery at the grassroots level. The surveyed questionnaire information (N=150) obtained from the service receivers have been analyzed with Statistical Package for the Social Sciences (SPSS) v. 11.5, for descriptive statistics. Similarly, the quantitative data are presented in tables with percentages and the quantitative data have been substantiated by qualitative information received from interview and FGDs.

5.1 Awareness of Services

Awareness of services is a prerequisite for effective service delivery as it enables people on what services to choose and what not to. Awareness enhances people's participation and helps to identify the needs of the people, empowers disadvantaged groups, integrates indigenous knowledge system into project design, provides learning opportunity between the program and local people (Dhakai, 2008, p. 4). Unless people are well-informed on what services are available from the service delivery points, they hardly approach for receiving services. Therefore, it is essential that people have good knowledge on what services they could receive from the service center. The following table presents the awareness level of farmers at three different agriculture service centers.

Table 5.1 Awareness of Services (N=150)

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N1=50	%	N2=50	%	N3=50	%	N	%
Agree	48	96	45	90	43	86	136	91
Disagree	2	4	5	10	7	14	14	9

Source: Field study, 2015

This study found that the majority of farmers (91%) who visited the service center had awareness on what services ASCs provided; whereas the small number of farmers (9%) said they were unaware of the various services provided by the service centers and they visited the centers expecting their support. The above table also shows that the awareness level is slightly higher in the Hill and Mountain region than in the Terai region. The major reasons found behind this divergence were the disposition of the service providers, literacy level of service receivers, market access, and value of products (FGD Prasuani, August 2015).

5.2 Purpose of Visiting Agriculture Service Center

One of the objectives of governance is to deliver services by which people receive benefits from the policies, programs and projects executed by government and the benefits of the efforts are accessible to the majority of people (Khauaja, 2001). There are various reasons for which the service receivers visit the service centers. The purposes range from receiving pesticides, seeds and fertilizer to advisory support. Their views have been summarized as follows:

Table 5.2 Purposes of Visiting Agriculture Service Center (N=150)

Purpose of visit		Service Centers						Total	
		Betrabati		Naubise		Prasauni			
		N1=50	%	N2=50	%	N3=50	%	N	%
Pesticides, seeds and fertilizer	Yes	48	96	36	72	30	60	114	76
	No	2	4	14	28	20	40	36	24
Subsidy on agriculture implements/ tools/equipments	Yes	24	48	26	52	31	62	81	54
	No	26	52	24	48	19	38	69	46
Trainings on high yield products	Yes	10	20	14	28	21	42	45	30
	No	40	80	36	72	29	58	105	70
Consultation/advisory support	Yes	19	38	23	46	19	38	61	41
	No	31	62	27	54	31	62	89	59

Source: Field study, 2015

The above table shows that the majority of service receivers (76%) visited the service centers for pesticides, seeds and fertilizer and the second highest number of service receivers (54%) visited the service center for subsidy on agriculture implements/ tools/ equipment, followed by consultation/advisory support (41%) and the least priority for visit (30%) was for training on high yield products. However, it differs in the Hill, Mountain and Terai region as regards their purpose for visits as the table demonstrates that the majority of people (62%) in the Terai visited the service centers for subsidy rather than the other two service centers. Moreover, the number of the farmers (46%) who visited the service center for consultation is higher in Naubise (Hill area) than the other two service centers. Those who visited for consultation mainly got information on new crops and new methodology of farming (Interview, October 5, 2015). When the service receivers were asked why they mostly visited for pesticides, seeds and fertilizers, they viewed that the cost price at ASCs was cheaper and the quality was better than at the private service providers (FGD, Prasauni, Naubise, Betrabati, June, 2015).

From the above information we can infer that ecological differences effected on the purpose of ASC visit. Furthermore, this information also denotes that people have still some faith in public service delivery system.

5.3 Timely Delivery of Services

One of the preconditions of effective service delivery is the timely delivery of services (Singh, 2009). Timely delivery of services does not only ascertain the satisfaction of services but also the quality of services (Dhakal, 2007). When the service receivers were asked whether they could get timely services from the service centers, they had divergent opinions. The following table exhibits the service receivers' perceptions on timely delivery of services.

Table 5.3 Timely Services from Agriculture Service Centers (N=150)

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N1=50	%	N2=50	%	N3=50	%	N	%
Agree	22	44	26	52	8	16	56	37
Disagree	28	56	24	48	42	84	94	63
Total	50	100	50	100	50	100	150	100

Source: Field study, 2015

When the respondents were asked whether they were getting the services timely, 37% respondents opined that they were getting timely services, whereas 63% respondents denied that they were getting timely services. The above table further indicates that a higher percentage of respondents in Prasauni (84%) perceived the lack of timely delivery of services than in the other two ASCs. Furthermore, when the respondents were asked what mattered most in service delivery, 63% respondents from Betrabati service center were provided services with due process as per indicated in the citizen charter and as per queue rather than the other two service centers where ‘personal relation- ‘Chinjan’ (45%) in Prasauni and ‘persuasion’ (52%) in Naubise favored timely delivery of services. This information was crosschecked by FGD (N=3) and personal interview with the service receivers (N=15), it was found that most of the services provided by the ASCs were based on personal influences rather than the due process.

Table 5.4: What Mattered Most in Service Delivery (N=56)

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N	%	N	%	N	%	N	%
Due process	14	63	5	20	3	33	22	39
Personal relation, "Chinjan"	5	23	7	28	4	45	16	29
Persuasion	3	14	13	52	2	22	18	32
Total	22	100	25	100	9	100	56	100

Source: Field study, 2015

From the above information it can be inferred that the service receivers at the ASCs were hardly getting timely services from the service center. Furthermore, the services were provided to the majority of farmers on the basis of personal relations and persuasion rather than following the due process. From the above information, we can infer that service delivery mechanisms at the grassroots level have not yet been institutionalized.

5.4. Ways for Availing Timely Services

Timely delivery of services does not only ensure the satisfaction of service receivers but also ascertain the quality and accessibility of services (Shrestha, 2004; Singh, 2009). When the service receivers who opined that services were not delivered timely were asked what should be done to get timely services. It was found that 47% respondents opted for monitoring, whereas 23% wished for public awareness, 18% wished service providers should not be local and 12% opted for training to the service providers.

Table 5.5: Ways for Getting Timely Services (N=94)

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N1=28	%	N2=24	%	N3=42	%	N	%
Monitoring	14	50	7	29	23	55	44	47
Trainings to the service providers	5	18	4	17	2	5	11	12
Service providers should not be local	4	14	4	17	9	21	17	18
Public awareness on their rights	5	18	9	37	8	19	22	23
Total	28	100	24	100	42	100	94	100

Source: Field study, 2015

This information was verified from the key informants by asking why monitoring was important for the effective delivery of services. Service receivers (FGD=3) commonly viewed that as the employees were not regular in the office and absent for long duration without information, therefore, it was essential that monitoring from the line agency as well as from the people's representative was mandatory (FGD, Prasauni, Naubise, Betrabati, August, 2015). Furthermore, monitoring is required for inspection of task, improving performance planning, financial management, supply chain management, human resource management and development.

5.5 Quality of Services

Jain (2009) views that the quality of services to a large extent affects the effectiveness of the delivery of services, and for the quality of services there should be the transfer of function from the central level to the service delivery points. The information in the table shows that 68% respondents opined that service quality of the service center was poor and 32% respondents viewed that service quality of the services was satisfactory. The respondents were asked to put opinions on the following aspects; physical evidence of the service facilities and personnel, reliability of services, willingness of employees to provide services, employees competence in providing services, accessibility of services, employees' efforts to understand customers needs, proper communication between service providers and service receivers.

Table 5.6: Quality of Services (N=150)

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N1=50	%	N2=50	%	N3=50	%	N	%
Agree	20	40	15	30	13	26	48	32
Disagree	30	60	35	70	37	74	102	68
Total	50	100	50	100	50	100	150	100

Source: Field study, 2015

This information indicates that the majority of service receivers (68%) were dissatisfied with the quality of services provided from the service center. Those service receivers who were dissatisfied with the services opined that service quality could be improved by increasing the number of service providers, providing effective training both for the service receivers and service providers and making the availability of quality fertilizers and seeds, encouraging women participation, and making the availability of irrigation facilities. One service receiver from Prasauni ASC remarked that

The pity is that the seeds which have been provided from the service center are sometimes beyond quality and sometimes they do not grow. Furthermore, the training has been hardly given to the service receivers as per their needs. Therefore the service centers should distribute seeds which can give better production and there should be regular training based on farmers' requirements (Interview, July, 2015).

The above discussion indicates that the services provided by the ASCs are not satisfactory, however, services could be improved through people's participation and providing the services as per the need of the farmers.

5.6 Accessibility of Services

For the effectiveness of services, it is essential that the services are easily accessible to the service receivers without delay and minimum of cost (Jain, 2009; Dhakal, 2007). The accessibility of services was judged under the measures as whether service providers are prompt and efficient, responsive to service receivers, friendlier to receivers, easily accessible to service receivers, non-discriminatory towards receivers, have good knowledge of receivers' needs to address their demand, have ability to provide services

as per goals, they have positive attitudes towards service receivers. The following table shows the accessibility of services as perceived by the service receivers.

Table 5.7: Accessibility of Services (N=150)

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N1=50	%	N2=50	%	N3=50	%	N	%
Accessible	17	34	12	24	5	10	34	23
Inaccessible	33	66	38	76	45	90	116	77
Total	50	100	50	100	50	100	150	100

Source: Field study, 2015

This table shows that the majority of respondents (77%) did not find the services provided by the service center easily accessible, whereas 23% of the respondents agreed that the services were accessible. Moreover, the higher percentage of respondents (34%) in Betrabati found the services accessible than the other two service centers. When asked what might be the reason for not being the services accessible, the majority of interviewees who were service receivers (10 out of 15) viewed the main reason being the distance, inadequate number of staff, inefficiency and the others (N=5) interviewees were of the opinion that it was mainly due to the apathy of the service providers in providing the services.

5.7 Achievement of Goals

Government uses extension as a support service as well as a policy instrument for influencing farmer's behavior to achieve its policy goals (Basnyat, 1995). Furthermore, in designing an extension system, contact with farmers, their active role and participation and the determination of farmer's need for technology are critical. The goals have been written in the norms as well as they are given in the term of reference given by the DADO. It is interesting to note here that the functions of the service center had been varying from service center to service center, and it also depended upon the interest of the DADO. The major functions bestowed to the service centers are as follows; encourage farmers to use modern technology, solve the farmers problems, provide information to the farmers as required, help to organize farmers groups, train farmers on seasonable crops, inform farmers on district seminars and training, coordinate with other line agencies, provide files, pens, paper registers to the new groups, participate farmers to planning and solving problems, discharge specialized knowledge through training.

The respondents were asked how far there had been the achievement of goals, and the following table provides their opinions on the achievement of goals.

Table 5.8: Achievement of Set Goals (N=150)

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N1=50	%	N2=50	%	N3=50	%	N	%
Achieved	14	28	15	30	5	10	34	23
Not Achieved	36	72	35	70	45	90	116	77
Total	50	100	50	100	50	100	150	100

Source: Field study, 2015

The above table indicates that 77% respondents believed that the set objectives of the service centers have not been fulfilled, whereas 23% believed on the achievement of goals by the service centers. When asked why the goals have not been achieved, the heads of ASCs (N=3) revealed that the goals have not been explicit. Moreover, goals were not accomplished by the service center efficiently due to lack of resources, insufficient number of service providers, lack of peoples' awareness as well as inefficient service providers.

5.8 Satisfaction with the Services

Satisfaction determines service effectiveness. If the innovations are equitably distributed among the wider section of the society without any discrimination, we can ascertain that service receivers are satisfied (Dhakal, 2008; Singh, 2009). Service receivers' satisfaction with services was judged under the measures as regards whether services were acceptable, provided in time, affordable, available in time, non-discriminatory and adequate. They gave different opinions on the issue of service satisfaction, which is summarized as follows.

Table 5.9: Satisfaction with Services (N=150)

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N1=50	%	N2=50	%	N3=50	%	N	%
Satisfied	25	50	25	50	23	46	73	49
Not Satisfied	25	50	25	50	27	54	77	51
Total	50	100	50	100	50	100	150	100

Source: Field study, 2015

This study shows that 73 (49%) of the respondents were satisfied with the services provided by the service center, whereas 77 (51%) exhibit their dissatisfaction with the services. The respondents were asked how they made demands with the authorities. Comparatively, service receivers (50%) in hilly and mountain region were more satisfied than in the Terai region (46%). They also expressed their dissatisfaction in various ways. 35.61% respondents expressed by meeting service providers, 37.88% respondents made demands in groups, 21.97% by dropping complaint letter and another 4.54% by talking on the phone. It was found that no respondent used email or internet in making demands with the service providers.

Table 5.10: Ways for Expressing for More Demands (N=132)*

	Service Centers							
	Betrabati		Naubise		Prasauni		Total	
	N1=46	%	N=39	%	N=47	%	N=132	%
Meeting service providers	27	58.70	14	35.90	6	12.77	47	35.61
Making demand in group	11	23.91	12	30.77	27	57.45	50	37.88
Dropping complaint letter	7	15.22	10	25.64	12	25.53	29	21.97
By phone calls	1	2.17	3	7.69	2	4.25	6	4.54
Total	46	100	39	100	47	100	132	100

Source: Field study, 2015

5.9 Effectiveness of Agriculture Service Delivery

Effectiveness of agriculture service delivery at the grassroots level is a dependent variable in this study. To analyze the effectiveness of service delivery, various components such as timely delivery of services, quality of services, accessibility of services, achievement of goals and satisfaction with services are considered. The following table demonstrates the existing status of the effectiveness of agriculture service delivery at the grassroots level in Nepal.

* Non-responses have been excluded from the analysis.

Table 5.11: Effectiveness of Agriculture Service Delivery (N =150)

		Service Centers							
		Betrabati		Naubise		Prasauni		Total	
		N1=50	%	N2=50	%	N3=50	%	N	%
Timely Delivery of services	Agree	22	44	26	52	8	16	56	37
	Disagree	28	56	24	48	42	84	94	63
	Total	50	100	50	100	50	100	150	100
Quality of Service	Agree	20	40	15	30	13	26	48	32
	Disagree	30	60	35	70	37	74	102	68
	Total	50	100	50	100	50	100	150	100
Accessibility of services	Agree	17	34	12	24	5	10	34	23
	Disagree	33	66	38	76	45	90	116	77
	Total	50	100	50	100	50	100	150	100
Achievement of Goals	Agree	14	28	15	30	5	10	34	23
	Disagree	36	72	35	70	45	90	116	77
	Total	50	100	50	100	50	100	150	100
Satisfaction with the services	Agree	25	50	25	50	23	46	73	49
	Disagree	25	50	25	50	27	54	77	51
	Total	50	100	50	100	50	100	150	100

Source: Field study, 2015

The above table shows that the effectiveness of agriculture service delivery at the grassroots level varies in the three ecological regions. It was found that the majority of respondents (68%) disapproved that there is quality of services, whereas 32% of the respondents found the services to be of quality. Furthermore, quality of service was found better in Betrabati than in the other two service centers. Regarding accessibility of services, the majority of respondents (77%) found the services inaccessible, whereas only 23% respondents found the services accessible from the ASCs. However, accessibility of services was found better in Betrabati than in the other two ASCs. Regarding the achievement of goals, it was found better in Naubise than the other two service centers. Similarly, satisfaction with services was found to be moderate in the case of Naubise and Betrabati. In contrast, satisfaction with services was found less than 50% in the case of Prasauni. The above table further indicates that the higher percentage of respondents (84%) in Prasauni perceived the lack of timely delivery of services than on other two ASCs. From the analysis above we can infer that there is partial effectiveness of the agriculture service center.

5.10 Effectiveness of Service Center

Ecologically, Nepal is divided into three ecological regions; mountain, hill and *Terai*. However, the government allocates the same type of resources for agriculture service delivery in all the three regions. The following table exhibits the divergence of the effectiveness of service delivery at three ASCs of the three districts.

Table 5.12: Effectiveness of Agriculture Service Centers (N=150)

		Betrabati		Naubise		Prasauni		Total	
		N1=50	%	N2=50	%	N3=50	%	N	%
Timely Delivery of services	Agree	22	44	26	52	8	16	56	37
	Disagree	28	56	24	48	42	84	94	63
Quality of Service	Agree	20	40	15	30	13	26	48	32
	Disagree	30	60	35	70	37	74	102	68
Accessibility of services	Agree	17	34	12	24	5	10	34	23
	Disagree	33	66	38	76	45	90	116	77
Achievement of Goals	Agree	14	28	15	30	5	10	34	23
	Disagree	36	72	35	70	45	90	116	77
Satisfaction with the services	Agree	25	50	25	50	23	46	73	49
	Disagree	25	50	25	50	27	54	77	51
Aggregate	Agree	20	39	19	37	11	22	49	33
	Disagree	30	61	31	63	39	78	101	67
	total	50	100	50	100	50	100	150	100

Source: Field study, 2015

The table demonstrates the holistic picture of agriculture service delivery at the grassroots level. It was found that majority of the respondents (67%) disagreed that there was effectiveness of agriculture services, whereas 33% respondents agreed that there was effectiveness of agriculture services. Comparatively, Betrabati service center was found to have better performance than the other two ASCs. The main reasons found were the dispositions of the service providers and awareness of service receivers.

5.11 Problems of Service Delivery

Problems of service delivery in Nepal have been explained by various authors. Sharma (2011) and Paudel (2011) explain the major problems being inadequate number of staff, incompetent employees, and lack of peoples' awareness. This study found the following major problems of agriculture service delivery in Nepal. This study showed that there is corruption in the service centers as the goods such as seeds, fertilizers, and tools which

are brought for free distribution are sold by the services providers. The level of corruption is found to be higher in Prasauni than the other two service centers. Likewise, service providers of Naubise provided services to the nearest than the other ASCs. Similarly, lack of adequate and efficient staff was the problem in all ASCs. Finally, the service centers were lacking physical resources in all the service centers and it was more prevalent in Prasauni. The number of the people who said there was corruption was 17%, whereas the number of the people who pointed out the lack of physical resources for delivering services was 46%. Furthermore, the people who found the inadequacy and inefficiency of the staff was 57%, provide service to the nearest was 85% and 91% found the staff not going to the field in time. This picture showed that lot more has to be done for enhancing the effectiveness of the services. From the above discussion it can be inferred that the major problems were inadequacy and inefficiency of the staff, corruption, providing services to the nearest, and the employees not going to the field in time.

Table 5.13: Problems of Service Delivery (N=150)

		Service Center							
		Betrabati		Naubise		Prasauni		Total	
		N1=50	%	N2=50	%	N3=50	%	N	%
Employees sell goods	Yes	7	14	4	8	14	28	25	17
	No	43	86	46	92	36	72	125	83
Provide service to nearest	Yes	41	82	47	94	39	78	127	85
	No	9	18	3	6	11	22	23	15
Not going to field in time	Yes	47	94	47	94	43	86	137	91
	No	3	6	3	6	7	14	13	9
Lack of adequate efficient staffs	Yes	31	62	30	60	25	50	86	57
	No	19	38	20	40	25	50	64	43
Lack of physical resources	Yes	22	44	19	38	28	56	69	46
	No	28	56	31	62	22	44	81	54
Total		50	100	50	100	50	100	150	100

Source: Field study, 2015

5.12 Conclusion

The main objective of this chapter is to find out the effectiveness of agriculture service delivery of three different ASCs of Nepal. The ASCs are the public sector agriculture service delivery units designed for providing agriculture services at the local level for increasing agriculture production. Various aspects of effectiveness such as timely delivery of services, quality of services, achievement of goals, accessibility of services and satisfaction with services have been analyzed. It was found that the people were less satisfied with the services given by the service center. The quality of service, achievement of goals and accessibility of services was found poor and the majority of people could not get services timely. Yet, they opined that the public institutions could be effective mechanism for the delivery of services. Moreover, they cited monitoring, adequate staff, physical facilities, financial transparency and community supervision as the major measures for improving agriculture service delivery. Furthermore, the disposition of the service providers is equally important phenomenon for effective delivery of services.

CHAPTER VI

FACTORS AFFECTING EFFECTIVENESS OF AGRICULTURE SERVICES AT GRASSROOTS LEVEL IN NEPAL

Service delivery is a process for achieving the specified mission, vision and goals of a policy, a program, a project or a plan and it demands active participation both from the service providers and service receivers. In the previous chapter, discussion focused on the attitude, beliefs and perceptions of service receivers in agriculture service delivery. The purpose of this chapter is to analyze the factors affecting agriculture service delivery at the grassroots level in Nepal. To achieve the goal, various factors such as authority delegation, people's participation, institutional capacity and organizational coordination which influence on the effectiveness of agriculture service delivery have been discussed.

The quantitative data received from service receivers from survey based questionnaire have been substantiated by qualitative data taken both with the service receivers and service providers. Bivariate analysis is used to decipher the relationship between dependent and independent variables. Effectiveness of agriculture service delivery at the grassroots level is a dependent variable and the factors such as authority delegation, institutional capacity, peoples' participation, organizational coordination, which affect the effectiveness, are the independent variables. The views discussed in this chapter are also derived from key informant interviews and FGDs. However, more concentration is on the key informants' views since they have more detailed knowledge on authority delegation, existing resources, people's participation as well as organizational coordination.

6.1 Authority Delegation

Authority is a situation which gives legal power and facilitates service providers to perform the activities autonomously. Furthermore, authority delegation is an activity by which right is delivered to individuals or groups for acting, making decisions, acquiring resources for performing the task to fulfill the given responsibility (Rondinelli, 1983). Therefore, it is necessary that adequate authority is delegated by the policy design (rules, regulations) for accomplishing the job given appropriately, and make the delivery of services effective.

It was hypothesized that if there is higher delegation of authority there will be effective service delivery. Authority delegation was judged under the measures whether there is adequacy of laws for service delivery, adequate authority is given for service delivery, there is proper division of responsibility, rules and regulations help to accomplish the given task, service providers can distribute and utilize resources autonomously. The following table shows causal relationship between authority delegation and effectiveness of service center as perceived by service receivers.

Table 6.1: Authority Delegation (N= 140*)

	Service centers						
	Betrabati			Naubise		Prasauni	
		Agree	Disagree	Agree	Disagree	Agree	Disagree
Effectiveness of service delivery	<i>Agree</i>	9	44	35	13	4	10
	<i>Disagree</i>	91	56	65	87	96	90
Total		100	100	100	100	100	100
N		11	32	23	24	23	27

Number expressed in italics represents percentage

Source: Field study, 2015

**'Donot know' is excluded from data analysis*

This table demonstrates that 9% of the respondents in Betrabati found that there is relationship between authority delegation and the effectiveness of agriculture service delivery, whereas 91% respondents were of the opinion that there is no effectiveness of services despite of authority delegation. Similarly, 44% respondents viewed that the effectiveness of service delivery will be possible even if there is no delegation of authority, whereas 56% respondents viewed that there is no effective service delivery and there is no authority delegation.

In the case of Naubise, 35% respondents viewed that authority delegation has positive effect on the effectiveness of service delivery, whereas 65% respondents opined that though there is delegation of authority, there is no effectiveness of services. Similarly, 13% respondents viewed that effectiveness of services is not only the cause of authority delegation, whereas 87% respondents viewed that there is ineffective services and there is inadequate authority delegation.

In the case of Prasauni, it was found that very small percentage of respondents (4%) agreed that there is effectiveness of services due to authority delegation, whereas 96% respondents opined that in spite of authority delegation, there is no effectiveness of services. Likewise 10% respondents viewed that effectiveness of service delivery may be due to other reasons rather than authority delegation, whereas 90% respondents viewed that there is no effectiveness of services and there is no delegation of authority.

From the above information we can infer that delegation of authority doesn't lead to greater impact on the effectiveness of service delivery. In other words, authority delegation does not ensure that there is effectiveness of services. Among the three service centers, the opinion of service receivers from Prasauni was stronger than the other centers as the highest percentage perceived that although there is authority delegation, there is no effectiveness of services. Out of the three service centers, service receivers from Naubise found better relationship between authority delegation and the effectiveness of services. From service receivers' perspectives, it can be inferred that authority delegation doesn't necessarily bring effectiveness of services. The main reason might be that service receivers were unaware on whether there had been the effect of authority delegation in service delivery or not.

Service Providers on Authority Delegation

Agriculture Perspective Plan 1995, LSGA 1999, National Agriculture Policy 2004, as well as NAES 2007 emphasized on giving active role to the grassroots level organizations in developing and executing the agriculture policies, however, legal authority had not been given to the ASCs. The budget is controlled either by the DADO or DOA, and they do not have freedom to use financial resources as budget is allocated for the service centers according to the program decided by the DADO and DoA. Moreover, it was found that only advice was taken in certain cases for developing the programs but the authority is restricted by DADO and DoA for organizing any program

on their own discretion. This situation was creating difficulties in executing programs effectively at the grassroots level. As the Head of Naubise ASC of Dhading in an interview opined that:

There has been no delegation of authority for making the services effective. Sometimes ASCs identify the needs of the farmers and proposal goes to the districts. Authority has been given to make bottom up planning but it is hardly materialized in practice as the final allocation of programs is mostly based on the discretion of the DADO or DoA rather than with the advice of the ASCs (Interview, October, 2015).

Since the service centers had no legal rights to use the resources with discretion and assess the needs of the farmers, only pronouncing the provision of making more delegation of authority in the policies and Acts and plan documents, APP, has not been very effective (Sharma and Bhandari, 2005). All the heads of service centers, one from each center (N=3) opined that more authority is to be given for the ASC for effective service delivery (Interview, Naubise, Betrabati, Prasauni, 2016). Furthermore, it was also found that the provisions made in the Acts, plans and APP have not been very clear. Ten public officials (out of fifteen) at different level stated that existing rules were not easy to understand, indicating ambiguousness. Similarly, the DADO of Rasuwa commented:

The rules are equally important for carrying the activities more effectively. Despite having various rules and regulations for giving the services, some of them are ambiguous and overlapping and others are weak in many aspects for effective enforcement (Interview, October, 2015).

It was also found that two service centers (Naubise and Betrabati) performed better while Parsauni's performance has not been satisfactory in terms of timely delivery, quality service and accessibility of services. The major reasons cited by district and central level officials (12 out of fifteen) is the lack of understanding of working procedures as well as the inefficiency of the service providers. There had been some training, and visits for the staff for enhancing better service delivery. Despite these encouraging initiatives, more efforts are required to authority delegation for improving performance in the delivery of services by initiating new service delivery mechanisms, inter-sectoral, prioritization,

budget allocation, and the absorptive capacity of the given sector (Interview, DADO Bara, 2015).

Similarly, there was a problematic relationship on exercising the authority for delivering agriculture services at the local level. As there was no division on who had to perform what activities, there was always a tension on accomplishing the goals of the organization. On the one hand, the DADO is under the direct technical supervision of the respective regional directors but administrative control is somewhat ambiguous. After the devolution of agriculture and livestock extension as per the LSGA 1999, the DADO fall under the administrative purview of DDC. However, the directors of the departments of MOAC are exercising administrative authorities in practice. This conflict in the line of command creates confusion to district extension offices (Thapa, 2010). This scenario demonstrates that though the government says that there is devolution in the delivery of services, it seems only the case of deconcentration as the local units do not have the freedom of decision-making and they need to get the consent of the central authority in making all kinds of decisions and the relationship between the central and local units is based on hierarchy and service centers have difficulty in using discretionary power as required for effective service delivery.

The above discussion demonstrates that the majority of service receivers view that service delivery is ineffective despite authority delegation. However, service providers' perspective is different as they state that there is less authority delegation which caused ineffective service delivery. Therefore, it cannot be inferred that higher authority delegation necessarily helps for better service delivery.

6.2 Institutional Capacity

Institutions are the structures, processes and behaviors which have a great impact in the delivery of services. They do not only shape the service providers' behavior but also shape the behaviors of the service receivers by making them responsible towards their demands (Jain, 2009). Institutional capacity in this research has been primarily explained in terms of the allocation of resources both human and physical, employee's professionalism and use of information communication technology (ICT).

It is assumed that if there is higher institutional capacity such as adequate financial, human, material and information, there will be better agriculture service delivery.

Institutional capacity is measured under the elements like availability of resources to the farmers on time, adequate authority for service delivery, professional efficiency of service providers, competence of service providers, adequacy of physical and human resources, appropriate institutional environment, right to make decision on the allocation of resources, The following table shows causal relationship between institutional capacity and effectiveness of service center as perceived by service receivers.

Table 6.2: Institutional Capacity (N=141*)

		Service Centers					
		Betrabati		Naubise		Prasauni	
		Agree	Disagree	Agree	Disagree	Agree	Disagree
Effectiveness of Service delivery	<i>Agree</i>	<i>50</i>	<i>33</i>	<i>50</i>	<i>29</i>	<i>67</i>	<i>7</i>
	<i>Disagree</i>	<i>50</i>	<i>67</i>	<i>50</i>	<i>71</i>	<i>33</i>	<i>93</i>
Total		100	100	100	100	100	100
N		14	31	14	34	13	35

Number expressed in italics represents percentage

Source: Field study, 2015

**'Do not know' is excluded from data analysis*

Half of the respondents (50%) in Betrabati ASC opined effectiveness of services occurred due to institutional capacity, whereas 50% respondents remarked that although there is institutional capacity, there is no effectiveness of the services. Furthermore, 33% respondents disagreed that institutional capacity might bring effectiveness of services, whereas 67% viewed that there is no institutional capacity and there is no effectiveness of service delivery.

Similarly, half of the respondents (50%) of Naubise ASC opined that if there is the effectiveness of services it is due to institutional capacity, whereas, 50% respondents remarked that although there is institutional capacity, there is no effectiveness of the services. Furthermore, 29% respondents rejected that effectiveness is the result of institutional capacity, whereas 71% viewed that there is no institutional capacity and there is no effectiveness of services.

Majority of respondents (67%) in Prasauni agreed that there is a positive linkage between institutional capacity and effectiveness of the services, whereas 33% respondents opined that though there is institutional capacity, there is no effectiveness of the services.

Furthermore, only 7% respondents viewed that institutional capacity does not necessarily bring effectiveness of services, whereas 93% opined that there is no institutional capacity of the service center, and there is no effectiveness of the services.

6.2.1 Resource allocation

Resource is a major component for the delivery of services from the service centers. It involves both human as well as physical resources, and the proper allocation of resources does not only guarantee the success of delivery activities but also ascertains the success of the program.

6.2.1.1 Human resources

Human resource is important basically for the knowledge, training and experience use. The total number of human resource of DoA is 4974; of which 2848 are technical and 2126 non technical (DOA, 2014). The human resource is allocated to seventy-five districts as per the number of service centers in a district. DADO, as an implementer of agriculture policies, is working as a coordinating mechanism for agriculture service delivery at the district level since 1991. There are four technical departments such as extension, horticulture, agronomy, planning and evaluation for delivering agriculture services in an effective and efficient manner. The following table demonstrates the number of employees allocated at the selected district namely Rasuwa, Dhading and Bara respectively. The following table shows the status of human resource of the selected *DADO and ASCs*.

Table 6.3: Number of Employees at DADO and Agriculture Service Centers

Districts	Filled posts	Vacant Posts	Total	Service center	Filled posts	Vacant Posts	Total posts
Dhading	36	14	50	Rasuwa	3	1	4
Bara	33	11	44	Dhading	4	---	4
Rasuwa	20	9	29	Bara	2	2	4

Source: Field study, 2015

There are 378 service centers in the country for providing agriculture services to the farmers. For making the services easy, there are 4 service centers in the Terai and Mountain districts and 6 are allocated in the hilly district. The staff allocated for each service center is one JT, two JTAs and one office assistant. The human resource allocated for the Rasuwa district DADO is 29, of which 18 are technical and 11 are

administrative posts, however, it was found that only 20 posts were filled up and all the others were vacant. Similarly, the total number of staff working at Dhading district in agricultural development is 50, but the existing filled up posts are 36. Similarly, the number of staff allocated in Bara District is 44, of which only 33 posts were filled. It is interesting to note here that agriculture service delivery is more a technical process than administrative, but it was found that the number of administrative posts is almost one-third of the technical posts.

As a rule, the government posts technical as well as non technical staff at service centers for giving services to the farmers. However, during this research, it was found that only in one service center all the staff were present and in one service center only one technical staff was handling the office. All the staff were found to be attending the service center in the case of Dhading, whereas it was lacking in both Rasuwa and Bara. Key informants, both from the district and ASCs level (N=6), were asked why they were absent and it was informed that they were either in the field or undergoing training rather than say they were absent or they were on leave. But when the researcher crosschecked it from the service receivers from three ASC (FGD, Prasauni, Betrabati, Naubise, August, 2015), it was found that it was like a ritual for them to be in the office turn by turn, and it was found that the technical staff were hardly present in the office making one or the other excuses in the case of Betrabati.

Both the service providers and service receivers (N=30) as well as FGD (N=3) identified shortage of staff as one of the impediments for effective agriculture service delivery and it prevented the service providers from giving effective services. The inadequate number of staff increased the workload of the field level staff and reduced their mobility. This situation has created difficulty in delivering services due to large coverage as well. The head of Naubise ASC commented:

It is difficult to provide services to the farmers effectively due to the lack of adequate staff. It is difficult to provide service due to wide coverage for providing services. One service center has to handle with 10-12 VDCs, which is very tough. How is it possible for our staff to make field visits when we have to walk for three hours to go to the nearest VDC? Furthermore how can a JT visit and give services to the farmers when it can visit only one VDC at a time. So, one technical staff should be available for each VDC. I think shortage of human resource has caused a

lack of synchronization of function that, in turn, has led to the lack of effective services (Interview, October, 2015).

All the heads of the service centers (N=3) viewed that effectiveness is not as it is desired due to the lack of adequate staff. They also explained that there was inadequacy of service centers as it was difficult to provide services by one ASC to many VDCs. Similarly, key informants from the DoA and MOAC (N=9) agreed the inadequacy of staff at ASCs to provide services to many VDCs by one service center as there was more work load pressure for the employees. Furthermore, they suggested that there should be at least one service center in each VDC which may provide better coverage for service delivery.

The above information clearly indicates that inadequate human resource has largely impacted on the effective agriculture service delivery at the grassroots. The service providers found it difficult due to the shortage of human resources. Therefore, it can be conferred that human resource planning should be the top priority of the government the delivery of agriculture services effectively. This study matches with the study made by Thapa (2010) which concludes that the main reason why service delivery is ineffective in the service center is because of the inadequate number of staff working at service center.

6.2.1.2 Physical Resources

Physical resources primarily consist of institutional infrastructure as well as financial resources. Both types of resources to a large extent affect the delivery of services. The following section explains the status of financial as well as institutional infrastructure for agriculture service delivery.

Institutional Infrastructure

Institutional infrastructure is the hardware of organization (Chitrakar, 1990). Institutional infrastructure involves buildings, vehicles and related materials required for the accomplishment of delivery activities. It was found that the ASCs of Rasuwa and Dhading District do not have their own building, whereas Prasauni service center has its own building for the operation of service delivery activities. The service centers in two ASCs, Naubise and Betrabati, are housed in rents. Since there is no appropriate infrastructure, the service providers resented as to how they could provide better services effectively when there is inadequate place to deliver the services. They are given the

workloads but inadequate resources is hindering the service delivery, which has made them disinterested and less motivated for carrying out the delivery of services effectively. The meeting rooms in Dhading and Betrabati were very small and there was no adequate furniture to conduct the meeting, whereas there was sufficient space in Prasauni but there was no furniture for the meeting and the building itself was in a damaged condition. Although the service providers had to provide services to a number of VDCs, there were no transportation facilities as well as communication facilities provided by the office. In short, lack of communication as well as transportation facility hindered for the effective execution of services.

Financial Resource

Funds are important aspects for the delivery of services. Timely disbursement of funds helps the effective execution of programs which are organized for the target groups. When asked whether funds were available for the program, respondents (N=2) from ASC viewed that funds were not provided to the offices on time and one respondent from ASC (N=1) said they were provided on time. Comparatively, the status of fund disbursement is better in Dhading and Bara districts than in Rasuwa district. Timely disbursement and adequate funding is required for the effectiveness of agriculture service delivery, however, it was not as promised. As the head of the Rasuwa ASC commented:

Timely disbursement of funds requires for the effective delivery of services, but it is not so in practice. If funds are not allocated according to the time framework it is not possible to get the things done. Therefore, timely disbursement and adequacy of funds that help achieve the successful completion of functions and lead to improved service delivery (Interview, 2015, September).

When asked how does the timely disbursement of funds matter for effective service delivery? The key respondents from the ASCs and district level (N=6) stated that if funds are disbursed in time, it helps to operate activities on time, further influencing others activities. With untimely disbursement of funds, not only are time and resources wasted, but the beneficiaries of the policy or project are also deprived of their rights to receive timely services from the government. Timely disbursement of funds helps timely delivery of tools to the farmers and the effective use of resources. It is interesting to note

here that funds are given to ASCs as per the program but they are not disbursed on time, and this situation has hampered with the effective delivery of services.

6.2.2 Employees Professionalism

Employees who have good knowledge, skills and attitude can provide better services to its clients. In this sense, professionalism plays an important role in the delivery of services. Professionalism is further explained by the actor's involvement and disposition in this process. It would further be aggravated by actors of government's willingness for voluntary improvements. Jain (2009) views that human resources that is trained competent with adequate skill, knowledge and training can provide services according to the need of farmers. This study found that the officials who were working in the service centers had received some trainings and qualification, however, they were very insufficient to fulfill the need of the farmers as the FGD (N=3) opined that private agrovate were providing better services than the public service centers. Further, service providers (N=3) agreed that that they do not have a very modernized network, and sometimes, farmers are more informed than the employees of agriculture service centers. Service receivers from the Dhading FGD opined that:

The services provided by the service centers are inadequate for three reasons. Firstly they do not have adequate knowledge for providing services. Secondly, they are not friendly to the service receivers. Thirdly, the public service providers are process oriented rather than result oriented and spent much time in giving the services. Here the service receivers hardly preferred to visit the ASCs (FGD, October, 2015).

The above statement pictures the professional status of government employees in providing services. The same perception was found in all the service centers under this study. Effectiveness of agriculture service delivery basically requires skilled and competent human resource. Skills do basically refers to the ability in accomplishing the task in a proper manner competency is explained in doing the task in an efficient manner. Effective service delivery can only take place when the human resource is knowledgeable for accomplishing the task effectively. Therefore, it can be argued that knowledge, skill and competence to a large extent determine the effective agriculture

service delivery. This view correlates with the view of Singh (2009) who explains that service delivery largely depends upon the skills and knowledge of workers.

In response to the question on whether the available human resource was skilled enough for providing agriculture services, all the key informants (N=15) from the ASCs/DADO/DOA/MOAC as well as the service providers agreed on the issue of the lack of adequate and skilled manpower for providing the services. Although they acquired education from universities or colleges as well as some knowledge and skills from experiences, there was still the lack of systematic and need-based training for executing the agriculture services effectively. The head from Bara service center commented:

None of the employees who entered the service possessed the required skill and knowledge. Skill has to be developed through a variety of professional training during their service career. Unfortunately, many staff have not undergone any comprehensive training program within 10 years of their service except their foundation training. I have hardly seen in my service career of 13 years that staff is provided with required training that is consistent with the requirements of their profession (Interview, August, 2015).

Professionalism also depends upon how much task is divided among employees for accomplishment. If more workload is given, they cannot perform well. Division of labor heavily affects on how the service receivers are served. It decides on who will do what, when, and how, everyone becomes aware of what must be done in a given situation when behavior is formalized (Mintzberg, 1979, p.83). Lack of division of labor affects service delivery. Highlighting the importance of division of labor, one of the officials at the central level from DOA remarked as follows:

Division of labor is prerequisite for the effective service delivery; Division of labor gives responsibility to different service providers on what is to be done. However, in the case of agriculture service center, we need to have expertise of various fields which is very difficult as specific knowledge is required in specific area (Interview, October, 2015).

In short, employees who have good knowledge skills and attitude can provide better services to its clients, and it was lacking in the case of service centers. Therefore, it can be inferred that higher the professionalism, better the service delivery.

6.2.3 Use of Information Technology (IT)

Koirala (2005) opines that most of the service provisions in the Nepalese context are devoid of essential technology for making service delivery effective. Information technology (IT) has virtually shrunk the world and has affected almost every walk of life. It is a power that could be harnessed by every sort of organization including extension. Potential of this technology can be exploited to strengthen own capacity for education to rural populations who have access to media (Sharma and Bhandari, 2005). Institutional capacity also depends upon how the information technology is used. Use of IT makes things easier for the execution of the program. It was found that none of the service centers had any computers or internet or telephone facility to make communication with the district office as well as their service receivers. When asked their opinion the head from ASCs (N=3) explained that money was not allocated for the communication and it hampered their performance as well. Use of IT does not only help for communication but also enhances to use the latest development which have taken place in the agriculture field. The service providers ASC (N=3) viewed that they did not have a very modernized network, in some cases, farmers were more informed than the agriculture service providers, which hindered them from coming to avail services at the service centers.

From the discussion above which is derived from both the quantitative and qualitative data, we can infer that there is a relationship between institutional capacity, which has been primarily explained in terms of the allocation of resources both human and physical, employee's professionalism and use of information technology (IT) and effectiveness of service delivery. As the majority of the respondents as well as key informants viewed that higher institutional capacity brings better service delivery, it can be concluded that institutional capability is must for the effectiveness of effective agriculture service delivery.

6.3 People's Participation

People's participation entails active involvement of both internal and external stakeholders in the decisions and actions that affect them. As a minimum requirement,

participation must include the ability to influence decision making and not just seek acceptance of a decision or action (Lloyd et al., 2007). Participation is possible if both the service providers and service receivers demonstrate willingness to work together for a specific purpose. However, the role of the service providers is pertinent in the sense that they can encourage people's participation through various types of mechanisms; organizing mechanism such as groups' formation, and developing mechanism such as exposure visits, seminars, interaction, IPM Farmer Field School.

There is a strong theoretical proposition that grassroots organizations can be responsive if they can fulfill the expressed needs and expectations of the service receivers and can deliver what they have promised (Blair, 2000). Therefore, the service providers have important role in making people's participation as their sincerity and willingness to perform the tasks matters more as most of the farmers in the developing country like Nepal have less awareness on what services could be provided from the service centers (Thapa, 2010).

It is assumed that if there is higher people's participation, there will be better agriculture service delivery. People's participation was judged upon the measures such as involvement of service receivers in decision making process, availability of services to the deprived group, free to make choice of among various, sharing of benefits and reception of feedback. The following table shows causal relationship between people's participation and effectiveness of service center as perceived by service receivers.

Table 6. 4: People's Participation (N=145)

		Service Centers					
		Betrabati		Naubise		Prasauni	
		Agree	Disagree	Agree	Disagree	Agree	Disagree
Effectiveness of service delivery	<i>Agree</i>	32	35	33	12	15	7
	<i>Disagree</i>	68	65	67	88	85	93
Total		100	100	100	100	100	100
N		19	26	24	26	20	30

Note: Number expressed in italics represents percentage

Source: Field Study, 2015

Thirty-two percent of the respondents of Betrabati agreed that there was positive relationship between authority delegation and the effectiveness of service center, whereas 68% respondents opined that though there was people's participation, there was

no effectiveness of service delivery. Furthermore, 35% respondents viewed that effectiveness of services might not be the cause of the people's participation, whereas 65% respondents opined that there was lack of the effectiveness of services so there was no people's participation.

In the case of Naubise, 33% respondents viewed that people's participation helped effectiveness of services, whereas 67% respondents opined that although there was people's participation, the service delivery was ineffective. Likewise, 12% respondents viewed that there is no relationship between people's participation and effectiveness of services, whereas 88% respondents viewed that as service delivery was ineffective there was no people's participation.

In the case of Prasauni, 15% respondents believed that there was effectiveness of services due to people's participation, whereas 85% respondents believed that although there was people's participation, there was no effectiveness of services. Similarly, 7% respondents disagreed that there was positive relationship between people's participation and effectiveness of services, whereas 93% respondents opined that there was no people's participation and there was no effectiveness of service.

6.3.1 Approaches toward Farmers' Participation

APP 1995 and National Agriculture Policy 2004 had been approved to streamline agriculture planning in the context of sustainable development. They envisaged some commitments to encourage participation of farmers by organizing them in various groups. The main target of the policy is to involve people from underprivileged groups such as women, Dalit as well as resource poor farmers.

6.3.1.1 Group Approach

The service centers create farmers' groups since it is obligatory that farmers needed to join groups for getting various services from the service center. Various groups such as vegetable farming, off season vegetable were formed to encourage farmers for using new technologies and improved seeds. The main objective of adopting this approach is to organize farmers of similar interests through exchange learning, participate in training and involving them into collective decision making process. In this approach farmers were organized into groups having similar interest and they were availed with external

visits, trainings, conduct demonstrations and participate in agriculture tours (Thapa, 2010).

There was also the provision of having a meeting once in a month. The meeting primarily involved the lead farmers and creating groups also took place on the basis of spontaneity. But it was found that the leaders of the groups mainly tried to fulfill their own interests rather than the interest of the group members or other farmers. For example, when they received seeds free of cost they availed it themselves first then to the other members of the group. When the service receivers (N=15) were interviewed whether they were benefitted from this approach, they opined that mostly the farmers were selected on the basis of knowing each other (*Chinjan*), mostly being subjective and there was discrimination in giving equal access to everyone to participate in groups. This situation demonstrates that only the farmers who had good relations with the ASC staff and those who could influence them would get better opportunities provided by the service center.

Another difficulty found in forming and developing groups was that there was more attraction to the NGOs than the DADOs program since they gave better incentives such as allowances. The head of Betrabati ASC said:

When NGOs and DADO organize groups, conduct training or seminars, the farmers prefer to participate in NGO and INGOs program since they provide better allowances like Rs 100-200 hundred as compared to the Rs 25 was given by the DADO (Interview, August, 2015).

6.3.1.2 Target Group Formation

GoN in Agriculture Policy 2004 also adopted the policies with a view to classifying farmers with less than half a hector of land and lacking irrigation facilities, farmers belonging to *Dalit*, *Utpidit* classes and other marginal farmers and agriculture workers as target groups. The service centers also provided services to the people from the disadvantaged groups; organize them as they were supposed to have poor access to all services provided by the state machinery. There had been some attempts to organize deprived groups in Dhading and Rasuwa, but it was lacking in the case of Bara. The

target group was provided free seeds as well as services. They were also provided loans with low interest.

Furthermore, Agriculture Policy 2004 aims to encourage women in farming for which women's participation is anticipated at fifty percent in all programs, provide mobile services and the information and statistics to all women without any discrimination. When the women were asked whether there was encouragement by the service centers for women's participation, all women informants (N=7) disagreed that there was the encouragement for women for any specific facilities.

From the information above, we can infer that target group formation was lacking at ASCs level as fewer number of *Dalit*, *Utpidit* classes and other marginal farmers as well as women were getting opportunities to participate in the agriculture service delivery process.

6.3.1.3 IPM Farmer Field School (IPMFES)

The main object of IPM Farmer Field School is to encourage adult farmers to learn from field observation and experimentation and reduce the use of pesticides in crops. Further, it was developed to help farmers tailor their Integrated Pest Management (IPM) practices to diverse and dynamic ecological conditions. In this approach farming community through peers learning observe and discuss dynamics of the crop's ecosystem that enables them to make their own crop management (Thapa, 2010). When the service receivers were asked about the effectiveness of IPMFES, five service receivers (out of 15) expressed its effectiveness whereas ten respondents were dissatisfied with the implementation of FFS, being more elite centric.

6.3.1.4 Participation in Planning and Monitoring

Agriculture policy ensures the involvement of stakeholders at the concerned level in the process of formulation, monitoring and evaluating plans connected with the agriculture sector from the central to the local level. It was found that the programs were developed by involving the views of Main Committee, and formulation of plans were based on their views. The program planning was done by involving farmers, political leaders from both the Ward and VDC and Ilaka level. However, it had not been very effective since the program was scrutinized either by the districts and concerned ministry. It demonstrates that there is peoples' participation at glimpse but it has been inadequate. When the

officeholders were asked what was the reason behind less participation of the public in the opportunities they get involved in the service delivery process. They gave two reasons; the first being the availability of better services from the private agrovats and those who could afford they prefer for taking services from them, and to the other being that after the new initiatives of providing services it was difficult for the farmers to come to the service center as the coverage of service was large, so it was inaccessible to the farmers to come to the service center. Similarly, it was difficult encouraging deprived and marginalized groups in the services since the services itself was demand driven rather than supply driven. The disadvantaged groups were left because of the inaccessibility, ignorance or lack of knowledge. The service receivers (N=8) also viewed that there were certain programs which demanded the active peoples' participation. When asked whether the farmers were participated in program planning, execution and monitoring, service receivers (FGD=3) informed that they were involved in the policy planning and implementation, and those who said there was participation informed that though they were consulted, their needs, demands were hardly addressed in policies.

6.3.2 Perception on People's Participation

The service providers were asked whether the service receivers participated in agriculture service delivery process, and what activities they participated in. It was found that the majority of service providers (N=10) agreed that there was a good participation of the farmers in planning, decision-making and implementation. Moreover, it was also found that the participation level in the Mountain and the hilly area was higher than the participation in Terai region. This view was crosschecked by the service receivers and found that the FGD (N=3) viewed that there was participation in the planning process but when the program came to be implemented then they were different than what they had demanded. One Prasauni service receiver sarcastically commented:

There is farmers' meeting to identify the need of the farmers, however, their demand is hardly addressed in the program. When farmers ask for the seeds for the maize, they avail seeds of wheat. So the need of the farmer and the supply from the service center do not match. Furthermore, the service center asks for making demands of various types of seed and pesticides, but never supply according to our needs, which makes us turn towards private agrovates for desired seeds and pesticides (Interview, October, 2015).

This situation demonstrates that though the government assures the supply of agriculture tools, seeds, pesticides as well as services according to the needs of service receivers, it hardly materializes in practice. As the service centers are providing services on demand base, it was very difficult to see active participation of the public in the agriculture service activities. Only the activists or educated people or people nearby the service center got the chance to visit the service centers (FGD Rasuwa, 2015). This picture shows that there is a gap between supply and demand and the participation of people was prima facie as the participation did not involve interaction.

The information above demonstrates that less percentage of people believed that there is positive relationship between people's participation and effectiveness of the service center, and the majority of people believed that there was not effectiveness of services despite of people's participation. When asked why people's participation doesn't ensure for the effectiveness of service delivery, the service receivers opined that people's participation mainly occurred as it was mandatory function for service centers to form groups, involve in planning as a process for providing services (FGD, Prasauni, Naubise, Betrabati, 2015).

6.4 Organizational Coordination

Organizational coordination is an important aspect of service delivery at the grassroots level. There is the existence of various organizations such as agriculture, health, education, post office, veterinary, forestry etc. for providing services at the grassroots level. Specifically, ASCs provide agri-services to the target population at the local level. Unless there is coordination among these organizations, it is difficult to accomplish the demand of people and fulfill the objectives of the plan, policy or programs. One aim of this study basically is to find the existing scenario of coordination and tries to decipher the status of inter and intra organizational coordination for the delivery of agriculture service delivery at the grassroots level.

There are various agencies working at the grassroots level where the various types of chain of command exist. Despite performing more or less self-contained tasks, no agency or department found at the local level can always work in isolation from others (Zafarullah, 1998 p.96). Therefore, it is essential that there should be a proper

coordination among various organizations of service delivery. Various organizations are assigned various tasks and they function independently, however their coordination is a must since they are serving the people, sometimes the same people. There are various organizations such as VDCs, NGOs, INGOs and private agriculture service providers which work for agriculture service delivery at the grassroots level. However, ensuring coordination among organizations is a difficult task. According to Pressman and Wildavsky, ‘Much more has been said about coordination than actually has been done about it, and coordination remains a principal “philosophers’ stone” in the analysis of good public administration?’ (Jennings and Crane, 1994, cited in Peters, 2006, p.115). Coordination is a multidimensional activity which takes place among a number of actors across a range of activities (Sommers, 2000, p.4). Coordination has become a complex and crucial issue required both for daily operations as well as for policy implementation (Panday, 2006, p.2).

It is assumed that if there is higher coordination, there will be better agriculture service delivery. Organizational coordination was measured under the components such as organizational capacity for coordination; legitimacy of organization, formal organizational structure, expertise, skill and leadership qualities. The following table shows causal relationship between organizational coordination and effectiveness of service center as perceived by service receivers.

Table 6.5: Organizational Coordination (N=141)

		Service Centers					
		Betrabati		Naubise		Prasauni	
		Agree	Disagree	Agree	Disagree	Agree	Disagree
Effectiveness of service delivery	<i>Agree</i>	47	25	36	20	10	10
	<i>Disagree</i>	53	75	64	80	90	90
Total		100	100	100	100	100	100
N		17	28	11	35	10	40

Number expressed in italics represents percentage.

Source: Field study 2015

The table shows that 47% respondents of Betrabati agreed that organizational coordination helped the effectiveness of agriculture service delivery; whereas 53% respondents believed that there was no effectiveness of services despite of organizational coordination. Furthermore, 25% respondents disagreed that there was any relationship

between effectiveness of services and organizational coordination, whereas, 75% respondents opined that there was no organizational coordination and there was no effectiveness of services.

In the case of Naubise, 36% respondents viewed that organizational coordination helped the effectiveness of services, whereas 64% respondents believed that though there was organizational coordination, effectiveness of services was lacking. Furthermore, 20% respondents disagreed that there was any relationship between organizational coordination and effectiveness of service delivery, whereas 80% respondents viewed that there was no organizational coordination and effectiveness of services.

In the case of Prasuni, 10% respondents agreed that organizational coordination helped the effectiveness of agriculture service delivery, whereas 90% respondents believed that though there was no effectiveness of services though there is organizational coordination. Furthermore, 10% respondents disagreed that there was any relationship between effectiveness of services and organizational coordination; whereas 90% believed that there was no coordination and effectiveness of services.

Coordination to a large extent depends upon the policy functions of any organization. In the case of agriculture service delivery, there are some objectives as well as strategic function delineated, which are needed for the effective delivery of services. In other words, the effectiveness of services can be judged in terms of how the various organizations coordinate with each other and work for achieving the stated goals. Proper coordination helps to meet the deadline in delivering the agri services and prevent wasteful expenditure of funds. Talking about the importance of coordination, District Agriculture Development Officer of Bara expressed his views as follows:

Coordination plays a significant role in the implementation of projects as different organization can have different experiences to share and their shared knowledge helps in bringing synergic effect for bringing about the effectiveness of any program. Furthermore, coordination is of great importance when a policy is carried out by several organizations because the effective delivery of services depends largely on the extent to which coordination among organizations involved is achieved (Interview, October, 2015).

The effectiveness of agriculture service delivery depends largely on how the various institutions are coordinated in fulfilling the given objectives. For fullest delivery of services, it is necessary that adequate coordination is made among various institutions on the basis of shared norms and values and function or normative relations. If coordination takes place properly, it meets the deadline in completing the projects and prevents wasteful expenditure of funds.

6.4.1 Mechanisms for Coordination

One of the major objectives of DADO is to enhance coordination and make the availability of services to the farmers. There are many agencies working for the agriculture service delivery. For example, there are 5 NGOs/ INGOS working for agriculture service delivery in Rasuwa, 3 in Dhading and 7 in Bara, but they hardly coordinated with each other for the agriculture activities. The informants were asked what organizations were in existence in the coordination of agriculture services and it was found that there was no particular organization for coordinating the agriculture service activities. While asked what types of coordination existed between organizations, all the service providers from the central to local levels (N=15) opined that there was less coordination between various agencies for delivering services. As a rule, service centers were called for the meeting in the VDCs but no concrete decisions were made for the upliftment of agriculture services. They were simply asked to sign the minutes and the money that had to be allocated was spent in the name of Krishi Sadak and electricity. Furthermore, there was no coordination among NGOs and VDCs for the implementation of programs as a result they viewed there was duplication of programs. It was found that hardly any committees were formed for coordination to make service delivery effective. In answering the process of coordination, all the respondents of the service centers (N=3) held the similar view that there was no formal and strong coordination mechanism for the delivery of agriculture services.

One of the respondents pointed out that when there is lack of coordination for the division of labor, difficulties in ascertaining who does what cannot be avoided; in such a case, duplication of activities and efforts of those involved occurs (Interview, September 2015). Another respondent mentioned that due to the absence of clear division of labor, they do not know what their duties and responsibilities are in inter-organizational activities (Interview, September 2015). Although they are told to cooperate with others,

in reality, they can hardly cooperate as they are largely involved in intra-organizational function. This has caused coordination problems in their functions.

This finding supports the view forwarded by Sharma (2011) who opined that the main reason behind poor performance of grassroots organization is the poor coordination between various organizations who provide services at the grassroots level. Furthermore it was found that intra organizational coordination was also lacking in delivering services to the farmers at the grassroots level as the functions of the regional directorate was as information giving (CC office). This situation really hindered the smooth delivery of services and coordination was lacking between central level, regional district as well as local level offices.

When the service receivers were asked what sort of problems were faced in agriculture service delivery. Although they agreed that coordination was important in the delivery of services, however, all the key informants (N=15) viewed that there was no coordination in the delivery of services. Furthermore, it found that out of three districts, only in one district, namely Rasuwa, the coordination was found to be better. All service receivers in their interviews (N = 15) viewed that problems arise in coordination when division of labor is not specified. However, there is variation in the views of coordination, as the staff saw more coordination and the service receivers saw less coordination.

The major issue envisaged on coordination was that the other agencies working in the VDCs did not coordinate on issues of service delivery which makes the activities more scattered and less fruitful. The further problem being that hardly any organization came for partnership with ASCs which made overlapping of the program. From the above discussion, we can infer the higher percentage of respondents as well as key informants opined that organizational coordination is a prerequisite for the effectiveness of effective service delivery and organizational coordination mattered for effective delivery of services.

6.5 Issues of Agriculture Service Delivery at Grassroots Level

This section consists of the major issues of effective agriculture service delivery. The information were collected both from the FGDs and interviews with the service providers (N=15) as well as service receivers (N=15). Three FGDs from three ASCs took place to understand their perceptions on various issues associated with the delivery of

agriculture services. A checklist was prepared to guide the FGD. The discussions revolved around the perceptions and experiences of the farmers on awareness, institutional capacity, authority delegation, people's participation and organizational coordination. Similarly, interviews with key informants are also presented.

a. Lack of clear division of labor and cooperation

In the cases of inter and intra-organizational activities, effective service delivery can take place when various organizations share the functions they perform. There should be clear division of work from the central level to the local level. The lack of clear division of work makes it difficult to find out which institutions are working on what activities of agriculture services and the lack of cooperation further hinders the timely and effective execution of the services. All the officials at the district and grassroots level (N=6) opined that for ensuring effective delivery it was necessary that the institutions which were giving the services in the same spatiality needed to cooperate in their activities, however it was found that they were dissatisfied with the cooperation from the central as well as regional level while delivering agricultural services.

b. Question of legality and flexibility

The major constraint for effective service delivery was that the service centers performed the function basically given by the DADO's guidelines. All the heads of ASC (N=3) commented that unless there is legal authority, it is very difficult to coordinate with the other agencies for the successful implementation of agri services. All the heads of service centers believed that it was not possible to coordinate with the other agencies due to the lack of clear legal authority of service center for coordinating with other agencies. Furthermore, they opined that there was the existence of obsolete laws and regulations and the existing rules and regulations were not suited for solving the problems in the present context as the private sector was using more flexible measures of service delivery.

c. Lack of competent human resources

Effective service delivery takes place when there are knowledgeable, experienced and skilled manpower. They do not only facilitate the delivery process but also encourage on how to perform the given tasks effectively and efficiently. In the case of agriculture

service delivery, it was found that the employees at ASC were found to be lacking in the necessary skills that could help the employees perform in a better manner that satisfy the needs of the farmers. The views of FGD Rasuwa are summarized as follows:

It is not possible to get efficient services from the agriculture service center as they do not have modern technologies and innovative ideas as compared to the private agrovates. The private agrovates try to bring new knowledge. If they do not bring new knowledge they will not survive in the market. We visit service center for recommendation rather than for getting services as subsidies. However, it is different in the case of public service providers as they get salary without initiating innovative ideas and without fulfilling the demand of farmers (FGD, October, 2015).

The above remark was collectively agreed by the service providers (N=3) as they opined there was the lack of trained and skillful service providers at ASC. They also viewed that for effective service delivery, morale and spirit of field level technicians should be promoted by imparting sound training, providing incentives and creating career development opportunities.

d. Service delivery in the diversities

Ecologically, Nepal has Terai region, hill region and mountain region where the potentialities are different. The crops and commodities that are feasible in the Terai may not necessarily be feasible in the hills and mountains, which also require people with different skills and knowledge. During this research, it was not found that the service centers had almost the same type of manpower without any difference. One service provider from Dhading remarked as follows:

Staff at ASCs is allocated according to the availability in the district. The service providers have limited ability to give advice and provide services as per the need of the farmers. It becomes for JT JTA like being jack of all in each field such as agronomy, horticulture, agriculture extension, which hinders better service delivery (Interview, October, 2015).

Furthermore, socio-economic diversities also affect service delivery as the people in some area are more resourceful enough to invest for high cost technologies whereas

others cannot. Marginal and small farmers require low cost technologies for increasing productivity.

e. The problem with decentralization

The main objective of the decentralization is to shift decision making authority to lower administrative and political levels (Shrestha, 2001). The lower level should get an opportunity for being physically close to people and plans and implement development programs with active involvement of people. Although the LSGA 1999 devolves the decision-making authority at the district level, it has not been in practice as the voice of the grassroots is hardly heard in policy planning and implementation. Furthermore, rights have not been given to the ASCs for making plans. It demonstrates that decentralization in the Nepalese context has been articulated but it is lacking in the case of developing countries like Nepal.

f. Use of IT in agriculture extension

Information technology can easily bypass two major problems of extension organizations that are one related to face-to-face contact with the farmers and the second related to transportation (Sharma and Bhandari, 2005). Moreover, it can reduce time and cost of service delivery. Communications not only empowers services providers for service delivery, but also helps to make intra and inter-organizational coordination effective. But it was lacking in the case of ASCs as none of the ASCs under this study were using IT for service delivery.

g. Inadequate infrastructure and transportation facility

Infrastructure such as roads, market centers etc are prerequisite for agriculture development. Transportation helps to deliver the products and increase the production in a cost effective way. Similarly, road is necessary to carry back the produce from the production pockets to the markets centers for selling purposes. Furthermore, road networks can also attract the traders to have direct contact with the producers resulting in farmers initiatives towards commercial production. Another difficulty faced by the service providers for effective service delivery was the lack of transportation. It was found that the service providers had to provide services to many VDCs, but they were not given transportation facilities to visit the field as per the demand of the farmers. In

the case of Bara district, one cycle was provided for one service center but it was not adequate for field visits because of the large coverage that had to be undertaken..

h. Lack of inclusive participation

The service centers employed various mechanisms for encouraging people's participation. However, it was found that only the active farmers participated in and the underprivileged groups, and ethnic groups, and women were left out in the participation process (FGD Prasauni, Naubise and Betrabati, 2015). Need for farmers have not been assessed properly, and active farmers were more concentrated for the self interest. Therefore, it can be inferred that people's participation is still elite centric.

There has been the policy provision of involving 40% of women in agriculture program. More attention has to be given to formulate women farmer specific programs and get their participation. Women farmers were required to be involved in the exposure of training, visits and interactions, so that they could build their capacity to carry out agriculture programs efficiently and effectively. Similarly, priority had to be placed to include women farmers in the key positions of groups and organizations. Similarly, the disadvantaged sector of population which constitutes a considerable mass of people was not streamlined in agriculture development. The disadvantaged group are either marginal farmers or the landless so it is really a difficult task to benefit them through the normal program.

i. Objective monitoring and supervision

Central programs were not received on time which made it difficult for implementation and monitoring due to the lack of time, staff unavailability as per the need of institutions as well as due to the geographical situation. Monitoring and supervision particularly from the center is poor. Supervision teams from the center had limited reach in the assigned districts. Even if it is done, it had not been done objectively. So less complicated monitoring format with clear indicators should be developed with the consensus of the major line agencies and furnished well to meet the objectives (Sharma and Bhandari, 2005, p.32). An official from the Department of Agriculture commented:

Once I was asked to monitor the program carried out by the various grassroots organization on agriculture and it was also instructed in the letter a committee comprising five members from different departments

must be formed. It was surprising that it did not refer to which member will take care of what duties and responsibilities in organizing that program in instruction. He further noted: I do not understand coordination. I do not bother whether coordination exists or not. The only thing I understand is that I have to actualize those tasks assigned to me. Being an officer in charge of the agriculture department, I am responsible for accomplishing all the tasks related to agriculture in the service center, and I have to do it even though no other officer cooperates with me (Interview, October, 2015).

j. Bureaucratic politics or discrimination among the civil servants

Bureaucratic politics was another challenge which created difficulty in the smooth delivery of services. As the departmental heads demonstrated discriminatory attitude towards their staff working at the grassroots level, the staff at work hardly had good disposition to provide the services. Furthermore, it led to lack of harmony in carrying out the activities. Another difficulty was the opportunity as well as incentives given to the employees at work. It was found that the heads of service centers felt that they were in the service centers since they did not have any link to be in a better office. The ASC head from Bara remarked:

Officers of the district and central level do not reckon us as organizational assets; they treat us as their servants. They do not cooperate with us; rather, they merely expect obedience from us (Interview, October, 2015).

This demonstrates that the disposition for service delivery was minimal among the service providers who are working at the grassroots level since the opportunity is given on the basis of favoritism as well as political affiliation.

k. Norms are rigid and not time-friendly

Due to the rigidity of norms, it was not possible to make changes in the programs as per the needs and demands of the farmers. So the service providers (N=12) saw the need for making some flexible provisions for making the services more effective. Timely changes in norms make the service delivery effective as it addresses the need of time and it may pave the road for more discretion to be used by the service providers.

l. Lack of coordination

The majority of the respondents viewed that there was a problem among various organizations in terms of delivering services. Although they performed the same activity or run the same program, they did not have coordination and this led to program duplication, making the service delivery ineffective. One agriculture service provider of Dhading opined that:

There are various organizations working for the delivery of agriculture services such as seeds and pesticides as well as for subsidy, and they provide to the same persons or groups and the unprivileged groups are left out. VDCs 15% fund is not functional as agriculture is in low priority. Various organization are involved in service delivery but there is very weak coordination. Furthermore, there is hardly any coordination for involving people in the development of agriculture plans (Interview, October, 2015).

The above information clearly indicates that there are some problems of coordination which create intricacies in the effective delivery of agriculture services.

m. Lack of awareness and communication

It was also observed that there was Citizen Charter in the case of Naubise and Dhading, but it was lacking in the case of Prasauni. Furthermore, they still saw the relevance of supply-driven services as farmers are not motivated to commercial products and their whole motivation is towards sustenance farming. Therefore, more awareness is required for the effectiveness of agriculture service delivery.

6.6 Measures for Effective Service Delivery

The majority of the respondents viewed that there were problems among various organizations in terms of delivering services. Therefore, they were asked how effective service delivery could be obtained. Interview with key informants (N=30) and discussion with Focus Group (N=3) revealed that it was essential to have strong legal provision for coordination regarding effective agriculture service delivery, clear division of work, legal framework, a single authority for planning the district level program, involvement of

agriculture-stakeholders for getting feedback for necessary arrangements, service-oriented attitude of the service providers, who were working in the service delivery mechanism at the grassroots level.

6.7 Conclusion

This chapter primarily focused on the various factors, which contributed for the effective delivery of agriculture services. Firstly, it was found that no adequate authority is given to the agriculture service center for carrying out the delivery activity as the service center itself is not recognized as the legal entity. Secondly, lack of adequate human resources further hindered the delivery part. Thirdly, it was found that institutional capacity of the service center was very poor. Finally, there was lack of coordination among various organizations for carrying out the activities though they had to have some linkages.

CHAPTER VII

SUMMARY, FINDINGS AND CONCLUSION

7.1 Summary

The term ‘governance’ is in use in a variety of ways and has a variety of meanings. There is a pervasive, identifiable, shared, global perception of governance as a topic far broader than the government; the governance approach is seen as a new process and practice of governing, or a changed condition of ordered rule; or the new technique by which society is governed. Moreover, governance is related to future-oriented open policies, developing professional bureaucracy, transparent and accountable government, strong civil society and rule of law, accountability, predictability and participation.

There has been a paradigm shift in the notion of governance. The first wave of governance was mainly academic and no concrete efforts were made to make the data accessible for policy makers and practitioners. The second wave was driven by optimism and more concentration was given on quick fixes and results and it was led by donor agencies. The third wave of governance, which was bottom up alternative to engage civil society, stressed on human rights and social development issues and it was influenced by social movements and activists groups around the world. In the contemporary society, governance has become a critical aspect of people’s aspiration, effective service delivery, administrative goal and the agenda of civil society.

The rise of grassroots organizations as key actors in service delivery in the developing countries is envisaged as a new form of governance and the issues of public service delivery are multifaceted, complex and multidimensional in nature. In this context, Nepal does not have a very long history of formal governance at the grassroots level. Prior to unification in 1768, different indigenous nationalities had their own homeland and self-rule under voluntary organizations, which were organized on the basis of different castes and ethnic groups.

The Nepalese government has been providing various public services like health, education, communication and agricultural services through public service delivery mechanism. Both central and local government bodies are responsible for providing public services at the grassroots level. Although service units are administratively and financially managed by the district level offices, they are controlled by their regional offices, the central level departments and ministries. Therefore, there seems to be a long chain involved between service delivery units at local levels and the ministries in terms of budgeting, planning, programming and staffing. Hence, the role of the central government in service delivery is critical since it has the lead role in policy formulation, financing, regulation and actual delivery, however, service delivery has not been efficient and effective, owing to a long chain involved from policy formulate poor match between financial allocation and preferences. The other reasons are lack of fairness, equality, accountability, opportunity, choice, participation, mutuality, reciprocity and continuous learning which lead to the poor service delivery in the context of developing countries.

During the Rana regime, some measures towards agricultural development were initiated by the four *Rana* prime ministers Janga Bahadur, Chandra Shumshere, Juddha Shumshere, Mohan Shumshere between 1851-1951, but remained in a limited condition since the main objective of the effort was to address the shortage of food grains in Kathmandu as well as the recessions caused by the two World Wars. Therefore, the evolution of agriculture service delivery can be depicted into three distinct phases. The period between 1951-1956 was a transition when some programs such as TVDP, research oriented development program and donor assisted programs were undertaken. The period between 1956 to 1990 demonstrated some significant efforts made by the Nepalese governments for the development of agriculture both in the urban and rural areas. The initiatives seemed to have been undertaken mainly with the support of the donor agencies. Undoubtedly, there were some changes in agriculture service extension during that period. However, the efforts had not been very fruitful due to the frequent changes in the delivery mechanism which were top down in nature and they seemed to have created a sense of confusion and dilemma for both the service providers and receivers.

Planned agricultural development made some crucial efforts for the agricultural development for improving the economic situation of the Nepalese people. So far the governments have already implemented 13 plans and fourteenth plan is in progress. The

plans have not been very successful to fulfill the needs, hopes and aspirations of the farming community. The main reason being that agricultural objectives in the plan are carefully written but not clearly defined, effectively translated into operational programs especially in quantitative terms. Likewise, the plan outlays were calculated on a planning model-based on incremental capital output ratio whose performances have not been matched with expectations (Chitrakar, 1990). Furthermore, plans have tried to involve the people in formulating and implementing the plans, however, the process has remained a centralized one.

The Peoples' Movement of 1990 displaced the erstwhile *Panchayat* system of governance to institute the Multi-Party Democracy. After 1990, the government made some changes in the structure of the agriculture sector. The services provided during the period are more demand-driven than supply-driven. This phase emphasized on participatory agriculture service delivery approach and the private sector has been facilitated for providing agriculture service delivery functions. However, it is arguable that in the country which has low level of awareness, investment, unorganized people can be served by demand-driven mechanisms rather than supply-driven efforts.

Nepal did not have very specific agricultural policies and plans up to early 1990s. It was only after mid-1990s, the Nepalese government came up with a specific agricultural plan termed as Agriculture Perspective Plan (APP) (1995-2015) which has twin objectives of poverty reduction and sustainable agricultural growth with multiplier effects on the non-agriculture sector. National Agricultural Policy 2004 borrows from APP, and National Agricultural Extension Strategy 2007 outlines the implementation mechanism to achieve the goals set by the foregoing policies.

Local Self Governance Act 1999 has taken initiatives of the central government orient towards strengthening the local institutions through the enactment of legal measures. There are District Agriculture Development Offices (DADOs) in all 75 districts of the country respectively for agriculture related extension services to support the agricultural producers. After the devolution of agriculture and livestock extension services to the District Development Committees (DDC) according to Local Self-Governance Act 1999, the DADOs fall under the administrative purview of the DDC. However, the regional directors of the departments of MoAD are exercising administrative authority in practice.

This conflict in the line of command creates confusion to district extension offices. This situation persists because of the absence of elected body in the DDC. The DDCs are presently headed by the Local Development Officers who are the cadres of the Ministry of Local Development (MoLD). The government has devolved agricultural extension to the local bodies. The devolution of the agricultural extension to the local elected bodies has, however, created new challenges than opportunities due to the lack of clarity in the division of work. Furthermore, the following problems such as domination of supply driven approaches rather than demand driven, failing to cater the needs of the specialized client and demand for location specific extension services as required by the commercialization of agriculture, high cost, low impact of extension programs, insufficient face-to-face contact between extension worker and farmers, inadequate funds for operational purpose, inadequate technical qualifications of grassroots extension workers such as JTs/JTAs, inefficiency of extension personnel, dilution of impact by thin coverage exist in agriculture service delivery.

Agriculture extension as a public service delivery mechanism plays a vital role in agriculture service delivery in Nepal. Agricultural extension focuses on technology transfer to adaptation by farmers and increased productivity. Two-thirds of the population in Nepal are employed in agriculture and agricultural service delivery is mainly the function/responsibility of two departments under the ministry of agriculture and cooperatives. A number of NGO's and private organizations are also conducting agricultural extension activities. However, neither extension approaches could be described as well-functioning at present time. The main objectives of this study were to review the policy provisions of agriculture service delivery for deciphering authority delegation status at grassroots level agriculture service delivery, to explore the institutional capacity of the service centers, to explain the level of participation for effective agriculture service delivery, to explain the role of organizational coordination in agriculture service delivery and to analyze the opinions of service providers and service receivers on various aspects such as timely delivery, quality, satisfaction, achievement, accessibility.

In this backdrop, this study investigated the effectiveness of agriculture service delivery at the grassroots level. The effectiveness of agriculture service delivery is a dependent variable and factors affecting it are independent variables. Therefore, for exploring the factors affecting the effectiveness of agriculture service delivery system at grassroots

level, this study made efforts to understand and explain the wider factors such as policy environment, authority delegation, participation, coordination, the possession of relevant skills, managerial competencies, and issues relating to organizational structure, and organizational coordination.

In order to analyze the effectiveness of agriculture service centers at the grassroots level, this study combined both quantitative and qualitative methods for collecting two different types of data. The quantitative data was collected by using structured questionnaires which were administered to 150 respondents from three service centers which are needed to map the attitudes, beliefs and perceptions of service receivers on the effectiveness of agriculture service delivery at the grassroots level in Nepal. Similarly, qualitative data was obtained from both the service providers (N=15) and service receivers (N=15) through interview, and three focus group discussions (N=10 in each service center) to decipher the complex processes of authority delegation, resource allocation, service delivery, institutional capacity, people's participation, and organizational coordination which has a significant relevance to explain the effectiveness. The respondents and key informants were the people both from central to grassroots level. The main objective of this strategy was to analyze subtle relationships and intricate processes involved in service delivery. This study used sequential explanatory research design and the respondents were the people responsible for service delivery and receivers of service delivery.

7.2 Findings of the Study

7.2.1 Effectiveness of Agriculture Service Delivery

Service delivery at the grassroots is one of the important functions of the government. It is the prime motive for which the public officials conduct their activities at the grassroots level. Agriculture service delivery in Nepal is directly related to the economic and social development of the people as many of the people are directly engaged in farming for their livelihood. ASCs as public institutions have the responsibility of providing agriculture services at the grassroots level. This study endeavored to find out the effectiveness of agriculture service delivery by depicting the views, attitudes and beliefs of service receivers. The effectiveness of agriculture service delivery has been explained

in terms of timely delivery of services, quality of services, achievement of goals, and satisfaction with services as well as accessibility of services.

This study found that 91% respondents who visited the service centers had awareness regarding agriculture service delivery; whereas a small percent (9%) of respondents said they were not aware of the various services provided by the service center and they visited the centers if they could get any support from there. Comparatively, the awareness level is higher in the Mountain and Hill regions than in the Terai region. The major reason cited by the service receivers from the each selected ASCs was, dispositions of the service providers, literacy level and market access.

The purpose for which the service receivers visited the service centers ranged from receiving pesticides, seeds and fertilizer to consultation/advisory support. The majority of service receivers (76%) visited the service centers for pesticides, seeds and fertilizer and the second highest number of service receivers (54%) visited the service center for subsidy on agriculture implements/ tools/ equipment, followed by consultation/advisory support (41%) and the least priority was (30%) for training on high yield products. However, it differed in hilly region, mountain and Terai region as to their purpose for visits as the majority of the people (62%) in Terai visited the service centers for subsidy than in the other two service centers. Likewise, the number of the farmers who visited service centers for consultation (46%) is higher in Naubise (Hill area) than in the other two service centers. When the service receivers were asked why they mostly visited for pesticides, seeds and fertilizers, they viewed that the cost was cheaper and the quality was better in ASCs than in the private service providers.

Timely delivery of services is one of the prerequisites of effective service delivery. 63% respondents denied that they were getting timely services. It was found that a higher percentage of people in Prasauni (84%) perceived the lack of timely delivery of services than in the other two ASCs. Furthermore, it was found that 61% service receivers were provided services on the basis of personal relations and persuasion rather than according to the due process. From the information above, we can infer that service delivery mechanism at the grassroots level has not yet been institutionalized.

In this backdrop, the service receivers were asked what could be the ways to get timely services and it was found that 47% respondents opted for monitoring, whereas 23% wished for public awareness, 18% opted service providers should not be local, and 12%

for training to the service providers. This information was verified by the key informants and FGD (N=3) by asking why monitoring was important for timely and effective delivery of services. They commonly viewed that as the employees were not regular in the office and absent for long duration without information, therefore, it was essential that monitoring from the line agency as well as from the people's representatives was mandatory.

The majority of respondents (68%) opined that service quality of the service center was poor whereas 32% respondents viewed the service quality as satisfactory. Those service receivers who were dissatisfied with the services opined that service quality could be improved by increasing the number of service providers, effective training both for the service receivers and service providers and availability of quality fertilizers and seeds, women's participation, and the availability of irrigation facilities.

The majority of respondents (77%) did not find the services provided by the service centers easily accessible, whereas 23% of the respondents agreed that the services were accessible. A higher percentage of respondents (34%) in Betrabati found the services accessible than in the other two service centers. When asked what might be the reason for the services not being accessible, the majority of interviewees who were service receivers (10 out of 15) viewed the main reason being the distance, inadequate number of staff, inefficiency and the others (N=5) were of the opinion that it was mainly due to the apathy of the service providers in providing the services.

77% of the respondents believed the set objectives of the service centers had not been fulfilled, whereas 23% believed on the achievement of goals by the service centers. When asked why the goals have not been achieved, the heads of ASCs (N=3) revealed that goals have not been explicit. Moreover, goals were not followed by the service center efficiently due to lack of resources, insufficient number of service providers, and lack of people's awareness as well as inefficient service providers.

This study showed that 49% of the respondents were satisfied with the services provided by the service centers, whereas 51% showed their dissatisfaction. Comparatively, 50% of the service receivers in Hill and Mountain region were found to be more satisfied than in the Terai region (46%).

Effectiveness of agriculture service delivery at the grassroots level is a dependent variable in this study. To analyze the effectiveness of service delivery, various components such as timely delivery, quality of services, accessibility of services, achievement of goals and satisfaction with services were considered. The effectiveness of agriculture service delivery at grassroots level varies in three ecological regions. It was found that majority of respondents (68%) disapproved that there is quality of services, whereas 32% of the respondents found the services of quality. Furthermore, quality of service was found better in Betrabati than in other two service centers. Regarding accessibility of services, the majority of respondents (77%) found the services inaccessible, whereas only 23% respondents found the services accessible from the ASCs. However, accessibility of services was found better in Betrabati than in other two ASCs. Regarding the achievement of goals, it was found to be better in Naubise than the other two service centers. Similarly, satisfaction with services was found moderate in the case of Naubise and Betrabati whereas, it was less than 50% in the case of Prasauni. In aggregate, 33% of the service receivers found the effectiveness of agriculture service delivery, whereas, 67% disapproved the effectiveness of agriculture service delivery at the grassroots level. From the analysis above we can infer that there is partial effectiveness of the agriculture service centers.

Furthermore, this study found the following major problems of agriculture service delivery in Nepal. This study showed that there is corruption in the service centers as the goods such as seeds, fertilizers, and tools which are brought for free distribution are sold by the services providers. The level of corruption is found to be higher in Prasauni than the other two service centers. Likewise, service providers of Naubise provided services to the nearest than the other ASCs. Similarly, lack of adequate and efficient staff was the problem in all ASCs. Finally, the service centers were lacking physical resources in all the service centers and it was more prevalent in Prasauni.

7.2.2 Factors Affecting Effective Agriculture Service Delivery

The respondents were asked about the various factors which affected the effectiveness of agriculture service delivery. The following factors of governance such as authority delegation, institutional capacity, people's participation as well as organizational coordination were considered to explain the effectiveness of agriculture service delivery

at the grassroots level in Nepal. The results of causal relationship of dependent and independent variables are presented as follows.

Authority Delegation

Authority delegation is a process through which right is delivered to individuals or groups for acting, making decisions, acquiring resources for performing the task to fulfill the given responsibility. There has been the enactment of various Acts, plans and policies such as Agriculture Perspective Plan 1995-2015, LSGA 1999 as well as National Agriculture Policy 2004 which emphasize on giving active role to the grassroots level organization in developing and executing the agriculture policies, however, it is lacking in the case of ASCs since only advice is taken on certain cases for making the programs but authority is restricted for organizing any program on their own discretion. The authority delegation had been problematic for three reasons; firstly the ASCs are not recognized as legal entity which hindered them in planning and acting according to the requirements of the grassroots level farmers, secondly there is a problematic relationship on exercising the authority for delivering agriculture services at the local level as after the devolution of agriculture and livestock extension as per the LSGA 1999, the DADO falls under the administrative purview of DDC. However, the directors of the departments of MOAC are exercising administrative authority in practice. This conflict in the line of command creates confusion for district extension offices. The third is the lack of understanding of working procedure as well as the inefficiency of the service providers. There have been some training, and visits for the staff for enhancing better service delivery. Despite these encouraging initiatives, more effort is required to improve the performance in the delivery of services by initiating new service delivery mechanisms, inter-sectoral, prioritization, budget allocation, and the absorptive capacity of the given sector.

It was assumed that the higher the delegation of authority the more effective would the service delivery be. It was found that the service receivers did not find more impact on the effectiveness of services despite authority delegation. In other words, authority delegation did not ensure that there was effectiveness of services. Among the three service centers, the opinion of service receivers from Prasauni was much stronger than the other centers as the highest percentage of respondents perceived that although there was authority delegation, there was no effectiveness of services. Out of the three service

centers, the service receivers from Naubise found better relationship between authority delegation and the effectiveness of services. From this information, it can be inferred that authority delegation doesn't necessarily bring effectiveness of services. In contrast, the service providers from the ASCs opined the lack of authority delegation as a cause of ineffective service delivery. The perspective of service providers on authority delegation differs as the service receivers find there is authority delegation but not effective service; whereas service providers viewed lack of authority delegation hindered effective service delegation. Thus, it can be inferred that the hypothesis 'higher the authority delegation, better the service delivery' is rejected.

Institutional Capacity

Institutional capacity in this research has been primarily explained in terms of the allocation of resources both human and physical, employee's professionalism and use of information technology (IT). Both service providers and service receivers (N=30) as well as FGD (N=3) identified shortage of staff as one of the impediments of for effective agriculture service delivery. The inadequate number of staff increased the workload of the field level staff and reduced their mobility. Physical resources primarily consists institutional infrastructure as well as financial resources. Institutional infrastructure involves buildings, vehicles and related materials required for the accomplishment of delivery activities. It was found that the ASCs of Rasuwa and Dhading District don't have their own building, whereas Prasauni service center had its own building for the operation of service delivery activities. Timely disbursement of funds helps the effective execution of programs which are organized for the target groups. When asked whether funds were available for the program, two service providers (out of three) from ASC viewed that funds were provided to the offices on time and one service provider from ASC said funds were not provided on time. Comparatively, the status of fund disbursement was better in Dhading and Bara districts than in Rasuwa district. Timely disbursement and adequate funding is required for the effectiveness of agriculture service delivery, however, it was not as promised.

Human resource that is trained, competent with adequate skill, knowledge and training can provide services according to the needs of farmers. This study found that the officials who were working in the service centers had received some training and were qualified, however, that was insufficient to fulfill the needs of the farmers as the service FGD

(N=3) in their interview opined that private agrovat were providing better services than the public service centers. Furthermore, all service providers (N=3) of ASCs agreed that they do not have very modernized network, and sometimes, farmers are more informed than the employees of agriculture service centers. Furthermore, institutional capacity also depends on how the information technology is used. Use of IT makes things easier for the execution of the program. It was found that none of the service centers had any computer or internet or telephone facility to communicate with the district offices as well as their service receivers. When asked about their opinion, all the heads from ASCs (N=3) explained that money was not allocated for the communication and it hampered their performance as well. Use of IT does not only help for communication but also enhances the latest development which have taken place in the agriculture field. The service providers viewed that they did not have modernized network, in some cases, farmers were more informed than agriculture service providers, which discouraged them from coming to avail services at the service centers.

It was hypothesized that if there is higher institutional capacity such as adequate finance, human resources, material and information, agriculture service delivery would be better. From both the quantitative and qualitative data, it is found that there is a relationship between institutional capacity, which has been primarily explained in terms of the allocation of resources both human and physical, employee's professionalism and use of technology.

People's Participation

People's participation entails active involvement of both internal and external stakeholders in the decisions and actions that affect them. As a minimum requirement, participation must include the ability to influence decision making and not just seek acceptance of a decision or action. Participation is possible if both the service providers and service receivers demonstrate willingness to work together for a specific purpose. However the role of the service providers is pertinent in the sense that they can encourage peoples' participation through various types of mechanisms; organizing mechanism such as groups formation, and developing mechanism such as exposure visits, seminars, interaction, IPM Farmer Field School. There is a strong theoretical proposition that grassroots organizations can be responsive if they can fulfill the expressed needs and expectations of the service receivers and can deliver what they have

promised. Therefore, the service providers have important role in making people's participation as their sincerity and willingness to perform the tasks matters more as most of the farmers in the developing country like Nepal have less awareness on what services could be provided from the service centers. Various mechanisms of participation such as group formation, farmers group approach, target group formation, IPM farmer field School had been used, however, it has not been successful for catering the needs of the farmers.

There are certain programs which demand active people's participation. When asked whether the farmers participated in program planning, execution and monitoring, FGD (N=3) informed that they were involved in the policy planning and implementation, and those who said there was participation informed that though they were consulted, their need demands were hardly addressed in policies. Similarly, service providers were asked whether the service receivers participated in agriculture service delivery process, and what activities they participated in. It was found that 10 service providers (out of fifteen) agreed that there was a good participation of the farmers in planning, decision-making and implementation. Moreover, it was also found that the participation level in the Mountain and the hilly areas was higher than the participation in the Terai region. This view was crosschecked by the FGD (N=3) and they viewed that there was participation in the planning process but when the program came to be implemented then they were different than what they had demanded.

It was hypothesized that if there is higher people's participation, there will be better agriculture service delivery. Both qualitative and quantitative data demonstrated that fewer people believed that there is positive relationship between people's participation and effectiveness of service center, and the majority of people believed that there was not effectiveness of services despite of people's participation. When asked why people's participation doesn't ensure for the effectiveness of service delivery, the service receivers opined that people's participation mainly occurred as it was mandatory function for service center to form groups, involve in planning as a process for providing services and participation did not take the form of interaction and counseling.

Organizational Coordination

The effectiveness of agriculture service delivery depends largely on how the various institutions are coordinated in fulfilling the given objectives. There are various agencies

working at the grassroots level where the various types of chain of command exist. Despite performing more or less self-contained tasks, no agency or department found at the local level can always work in isolation from others. Therefore, it is essential that there should be the proper coordination among various organization of service delivery. Various organizations are assigned various tasks and they function independently, however, their coordination is a must since they are serving the people, sometimes the same people. There are various organizations such as VDCs, NGOs, INGOs and private agriculture service providers which work for agriculture service delivery at the grassroots level. However, ensuring coordination among organizations is a difficult task. The major issue envisaged on coordination was that the other agencies working in the VDCs did not coordinate with ASCs on issues of service delivery which makes the activities more scattered and less fruitful.

It was found that there was no particular organization for coordinating the agriculture service activities. While asked what types of coordination existed between organizations, all the service providers from the central to local levels (N=15) in their interview opined that there was less coordination between various agencies for delivering services. As a rule, service centers were called to the VDCs for meetings but no concrete decisions were made for the upliftment of the agriculture services.

It was assumed that if there is higher coordination, there will be better agriculture service delivery. From both the quantitative and qualitative data, it is found that there is a relationship between organizational coordination and effectiveness of service delivery as the majority of the respondents as well as key informants viewed that organizational coordination might lead to better service delivery.

7.3 Conclusion

This study basically tried to find out the effectiveness of agriculture service delivery at the grassroots level. Divergent factors such as authority delegation, institutional capacity, people's participation as well as organizational coordination which effected on the effectiveness of services had been discussed. The following conclusions has been drawn on the basis of analysis made in the above chapters.

There is the need of authority delegation for the effective service delivery at the grassroots level as it encourages the service providers in planning, implementing and

monitoring. Furthermore, the structural reform of agriculture extension and devolution of responsibility to government units has the potential for facilitating extension, transparency, local accountability and bringing services closer to the poor.

Adequacy of competent human resources with training, skills, knowledge and experience is a must for effective service delivery. As the service centers were chronically understaffed and under resourced, the services were ineffective. Furthermore the staffing situation is very poor and the coverage is very high, so it is mandatory to increase the number of service centers and the vacant posts are to be filled up for the effective delivery of services. Technical competence among staff must be improved through a series of refreshers courses, which should be incorporated with awareness building among extension staff to make them understand the rationale and modality of the approach. Likewise, ASCs ought to be provided transportation and communication facilities for delivering services conveniently.

As the programs had been developed without proper community participation, they had not been very effective. So, proper people's participation in the delivery of services is a prerequisite to guarantee the active involvement of the targeted households/communities in planning, implementation and monitoring for better agriculture services delivery. Moreover, using local social mobilizers from the outset to engage the community in the entire process and enhance the capacity of clients to implement program activities are essential. People's participation has to be increased by recognizing rural men, women and youths as extension clientele, empowering farmers to organize groups, ensuring their legal status through formal registration, and providing them training required to make plans and decisions. Farmers' organizations should be made effective and efficient for using their indigenous knowledge. Introduction of information and technology in the extension functionaries should be developed right from the grassroots level.

It is important to properly manage with necessary caution the transition from the traditional supply/delivery-based approach to the presently emphasized demand-based approach. The pace of phasing out of government responsibility has to be determined on the level of social preparedness and capability to build up the private service providers and the target beneficiaries.

Coordination among various organizations is mandatory for the effectiveness of agriculture service delivery. There has to be conducive environment to attract NGOs,

private sector, civil societies, production organization to participate in agriculture development by reducing overlapping and fulfilling the need. Multispectral coordination and linkages in terms of resources sharing functions have to be promoted to meet the current complexities in the agriculture sector. Proper coordination with the regional and district organizations of agriculture services is essential.

Finally, the ASCs perform their activities according to the guidelines given by the DADO. Therefore, it is necessary that ASCs get legal authority to implement various programs and projects with discretion.

7.4 Implications of the Study

Beyond the intellectual worth of this study, it is expected that the findings of this study will significantly contribute to better understanding of grassroots governance in Nepal. Nepal as an agriculture sustenance economy has a huge potentiality of agriculture. There are multiple actors who might be interested in crafting consequential interventions to enhance effective agriculture service delivery at the local level. National governments, civil society, local government bureaucrats, local political leadership as well as international donors might find the results of this study appealing to obtain expected outcomes in delivering various services through local governments.

The study findings further illuminates that particular attention needs to be paid to broader involvement of people at the local level. It is, therefore, clear that besides the fiscal and political resources, there is need to redesign mechanisms to ensure better participation of citizens at the local level. These range from strengthening people-friendly information channels, strengthening civil society participation at the grassroots level to ensuring all organizations operate with the desired human resource to promote pro-people initiatives.

It is generally accepted that delegation of authority and people's participation is a must for effective service delivery. In a different vein, this study found that for effective service delivery, institutional capacity as well as organizational coordination is mandatory.

7.5 Avenues for Further Study

The main objective of this study was to find out the effectiveness of agriculture service delivery at the grassroots level. For this, some factors such as institutional capacity,

authority delegation, and people's participation and organizational coordination have been considered to explain the effectiveness of service delivery in terms of timely delivery of services, quality of services, satisfaction with services, and achievement of goals. This study further illuminated the how governance has taken place at grassroots level in relation to agriculture service delivery. So, future studies may be carried out by using the other factors of governance like accountability, transparency, predictability. Furthermore, this study is carried out in a situation where the public service delivery mechanism is the same but the ecological region is different. Therefore, comparative case study can be designed to decipher the effectiveness of governmental and non-governmental entities which are delivering the agri services to the farmers, so that lessons learned on what can be done for effectiveness of agriculture service delivery could be useful for effective agriculture service delivery.

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APPENDICES

Appendix I : Questionnaire for the Service Receivers

Appendix II : Interview Guidelines for Service Providers

Appendix III : Interview Guide for Focus Group Discussion

Appendix IV : Agricultural Development during *Rana* Regime (1851-1951)

**Appendix V : Organizational Structure of Agriculture Service Delivery System in
Nepal**

Appendix VI: Map of Selected Districts for Study

Appendix I

Re: Questionnaire for the Service Receivers

Dear Respondents

I am a Ph.D Scholar of Faculty of Management, Tribhuvan University, Kathmandu Nepal. I am conducting a research on “*Grassroots Governance: The Role of Agriculture Service Centres in Service Delivery in Nepal*”. More specifically, the questionnaire administered to you aims to find the effectiveness of the agriculture service centers at grassroots level whereby service providers of public institutions deliver agriculture services to the farmers. Please be assured that all the information provided will be treated in absolute confidence and used solely for the academic purposes. No individual respondents or authorities will be identified in my research study. Your cooperation and support will be invaluable in ensuring a true picture of agriculture service delivery at grassroots level in Nepal.

With Regards

Laxmi Kanta Paudel

Research Student

Central Department of Public Administration

Faculty of Management

Tribhuvan University

Part A: General Information

1.	Service Center:			
	a. Betrabati	b. Naubise	c. Prasauni	
2.	Name of the Respondents (Optional):			
3.	Gender:			
	a. Female	b. Male		
4.	Age:			
	a. Up to 30 years	b. 31 to 45 years	c. 46 to 60 years	d. 61 years and above
5.	Occupation:			
	a. Agriculture	b. Business	c. Job	d. Others
6.	Education:			
	a. Illiterate	b. Literate	c. Primary level	d. Lower secondary
	e. Higher secondary	f. Bachelor level or higher		
7.	Farm size (in ha.)			
	a. 0.05-0.25 ha	b. 0.30-0.50 ha	c. 0.55- 2.00 ha	

Part B: Specific Information: Effectiveness of agriculture service delivery at grassroots level in Nepal

A. Timely Delivery

1. How often do you visit service center for receiving services? a. Very frequently b. Frequently c. Regularly d. Sometimes e. As required
2. Are you aware about the services provided by the ASCs? a. Yes b. No
3. What is your purpose of visiting the agriculture service center? Specify any two major reasons. a. Pesticides, seeds and fertilizer b. Subsidy on agriculture implements/tools/equipments c. Trainings on high yield products d. Any other
4. What is your purpose of visiting the agriculture service center? Specify any two major reasons. a. Pesticides, seeds and fertilizer b. Subsidy on agriculture implements/tools/equipments c. Trainings on high yield products d. Any other
5. Do you get timely services from the agriculture service center? a. Yes b. No (if No please go to question no 8)
6. If yes, how long does it take in getting services from the service center? a. Timely b. As per queue c. Little longer d. Very long time
7. If the services are delivered timely, what matters most? Only one answer a. Due process b. Personal relation (<i>Chinjan</i>) c. Persuasion d. Others (please specify...)
8. If not, what should be done to get timely services by the agriculture center? Give one suggestion. a. Monitoring b. Trainings to the service providers c. Service providers should not be local d. Public awareness on their rights e. Any others

B. Quality of Services

9. Do you get quality of services from the ASCs? a. Yes b. No						
10. If yes please provide your opinion on the following statements.	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
a. Physical evidence of the service facilities and personnel	1	2	3	4	5	9
b. Reliability of services	1	2	3	4	5	9
c. Willingness of employees to provide	1	2	3	4	5	9

a. Meeting with the service providers	b. By making demands in groups	c. By dropping letter in the complaint box	d. By phone calls
e. E-mails	f. Others		
21. All things considered how satisfied are you with the services of the service center?			
a. Very satisfied	b. Satisfied	c. Neutral	d. Dissatisfied
e. Very dissatisfied			
22. How services are delivered by the service centers?			
a. Through Users Groups	b. Through local NGOs/ CBOs	c. Directly from service centers	d. Others
23. If from service centers, how do they provide service?			
a. Field visits	b. From service centers	c. If any others, please specify.	
24. In order to deliver agriculture services effectively in the present context, what can be the appropriate mechanism?			
a. Non-government organization	b. Community -based organization	c. Political representatives	d. Public institutions
e. Others			
25. How do you rate the present service by the organization?			
a. Very effective	b. Effective	c. Neutral	d. Ineffective
e. Very ineffective	f. Don't know		

F. Authority Delegation

26. Do you think authority is delegated to the service centers for providing services effectively?						
a. Yes		b. No (If No go to question no 31)				
27. If Yes, State your opinions on the following statement.	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
a. Adequacy of laws for service delivery	1	2	3	4	5	9
b. Adequate authority is given for service delivery	1	2	3	4	5	9
c. Proper division of responsibility	1	2	3	4	5	9
d. Rules, regulations help to accomplish the given tasks	1	2	3	4	5	9
e. Service providers can distribute and utilize the resources autonomously	1	2	3	4	5	9

Appendix II

Interview Guidelines for Service Providers

1. How many employees are posted at the Agriculture Service Center?
 - a. no of posts
 - b. regular in attendance
2. What kinds of services are being delivered from the center?
3. Do you think your service centers have sufficient trained human resource to effectively carry out agriculture services? If yes, how often they are sent for training?
4. Do the organizations have specific provisions for providing training to the service providers? And how adequate are the trainings?
5. How is the financial situation of the service center? Do the organization allocate sufficient budget for running the office and providing services to the service receivers?
6. Of the allocated budget, under what heads more expenses is incurred?
 - a.
 - b.
7. What do think of the existing institutional infrastructure for providing agri-services? Are the institutional infrastructure regularly developed according to the need of organization?
8. What is the number of service users from the center as compared in the past?
9. What services do farmers seek preferably from the center? Mention in order of priority.
10. What is the process of providing services by the service centers?
11. Do you charge fee to the service users?
 - a. Yes
 - b. No
12. If yes, what type of fee?
 - a. Registration fee
 - b. Other fee
13. How is the flow/ response of the people to demand services?
 - a. As usual
 - b. decreased significantly
 - c. Increased
 - d. don't come
14. How are the farmers benefitted from the services given by the center?
15. How is the authority delegation situation in your organization? Can you use your discretion while providing the services?
16. Give five suggestions on what should be done for making services of centers more effective?
17. What are the limitations of the services provided by the service centers?
18. How do you provide information for the farmer?
19. How do you participate service receiver in service delivery activities?

Appendix III

Interview Guide for Focus Group Discussion

Group discussion will take place on the basis of the following questions.

1. What awareness programs are conducted by the ASCs?
2. How is the service delivery activities carried out?
3. In what context, do you understand authority delegation?
4. How satisfied are you with the services?
5. How is the resources utilized for providing services?
6. How competent are the service providers in providing services?
7. How are people participated in improving services?
8. How professional are the service providers of ASCs?
9. How are the various organization coordinated for delivery of agriculture services?
10. Do you think your participation is needed for effective service delivery?
11. Why is monitoring important for effective agriculture service delivery?
12. Do you have any suggestions for effective service delivery?

Appendix IV

Agricultural Development during *Rana* Regime (1851-1951)

Major information Related to Agriculture Development
<p>The period of Janga Bahadur (1846-1877): This phase constituted the first step towards agricultural development in Nepal. There was inadequacy of the food grains which compelled to find an alternative way as to irrigate tars (flat unirrigated land of the hills). Janga Bahadur ordered three water lifting pumps on his way home from the United Kingdom in order to explore irrigation possibilities in the tars of Nepal. Janga Bahadur also brought one Jersey bull and two cows and some seeds of clover grass and initiated a cattle breeding programme in 1851. Due to many technical problems, the irrigation project could not make successful. However, the Jersey cattle and the rampant growth of clover grass in Kathmandu brought a successful breeding program to Nepal.</p>
<p>The period of Chandra Shumshere (1901-1928): The first agricultural office (Krishi Adda) was set up in 1921 at Charkhal Adda with a view to increase production through the use of improved technology). It was the first institutionalized mechanism for agricultural advancement in Nepal. During that period an agriculture research program was operated within the compound of prime minister's residence. Later in July 1925, the Department of Agriculture was established to provide information on the modern agriculture practices to the farmers for producing more food in the Terai regions and as sources of supply to the Kathmandu Valley. Chandra Shumshere's efforts had been remarkable in agricultural development as he established different measures to improve Nepalese agriculture. The first modern canal irrigation project, the Chandra Canal at Saptari, was undertaken, to divert Trijuga river in the Saptari district to irrigate a gross of 12000 hectares with water. Nepalese agriculturists were sent to study outside the country, who were working at the first agricultural experimental farm established at Singh Durbar. During that period agriculture marketing facilities were also developed, so the agricultural goods could be brought from India and cleared through customs at Birgunj. Likewise, he invited a Japanese agricultural expert to advise the government on improving the agricultural situation of Kathmandu valley.</p>
<p>The period of Juddha Shumshere (1932-1945): It was critical period in the agricultural development of Nepal as the second World War did not only bring recession but also a food grain crisis to Nepal. To solve the deteriorating agricultural situation of the Kathmandu Valley, the agricultural research station was established at Balaju, the horticulture nursery at Godawari and the agricultural school at Chauni was established under the department of education to</p>

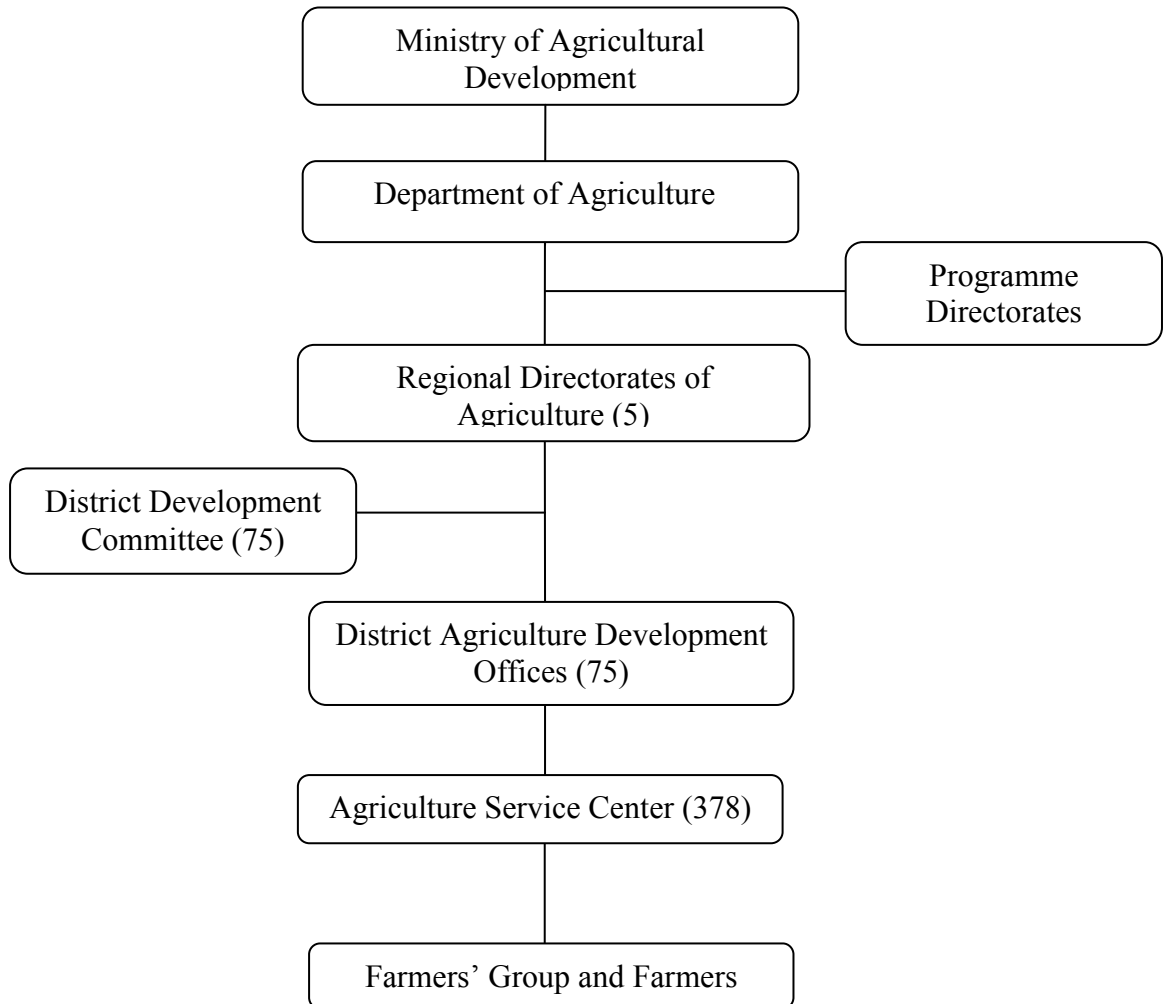
disseminate agricultural technologies to farmers through agricultural extension staff. Department of Agriculture Council was founded in 1937 to deal with agricultural policies. The Agriculture Board in 1938 designed a 20 year plan with an objective of doubling the national production of food crops, but did not come in to the effect. The remarkable contribution of this period was the construction of the Juddha canal which was built to tap the Manusmara River (Rautahat District) to irrigate 810 hectares of land. Similarly, to strengthen the activities of the department of agriculture, several divisions covering dairy, veterinary, horticulture, agronomy and engineering disciplines were created. The beginning of a livestock with sheep farms and red Sindhi cattle from Pakistan was also started during that period. Juddha Shumshere also sent Nepali students to India for agriculture training to meet the requirement for trained agriculturist, which was a continuation of Chandra Shumshere.

The period of Mohan Shumshere Rana (1948-1951): It is seen as a continuation of past efforts. Moreover, he sent agriculturists into field to prepare a series of reports on agriculture potential in the hilly area. But again in 1949 agricultural board drafted a 15 year plan but remained unexecuted as of the prior plan.

Source: Information compiled from Chitrakar, 1990, Paudel, 1986

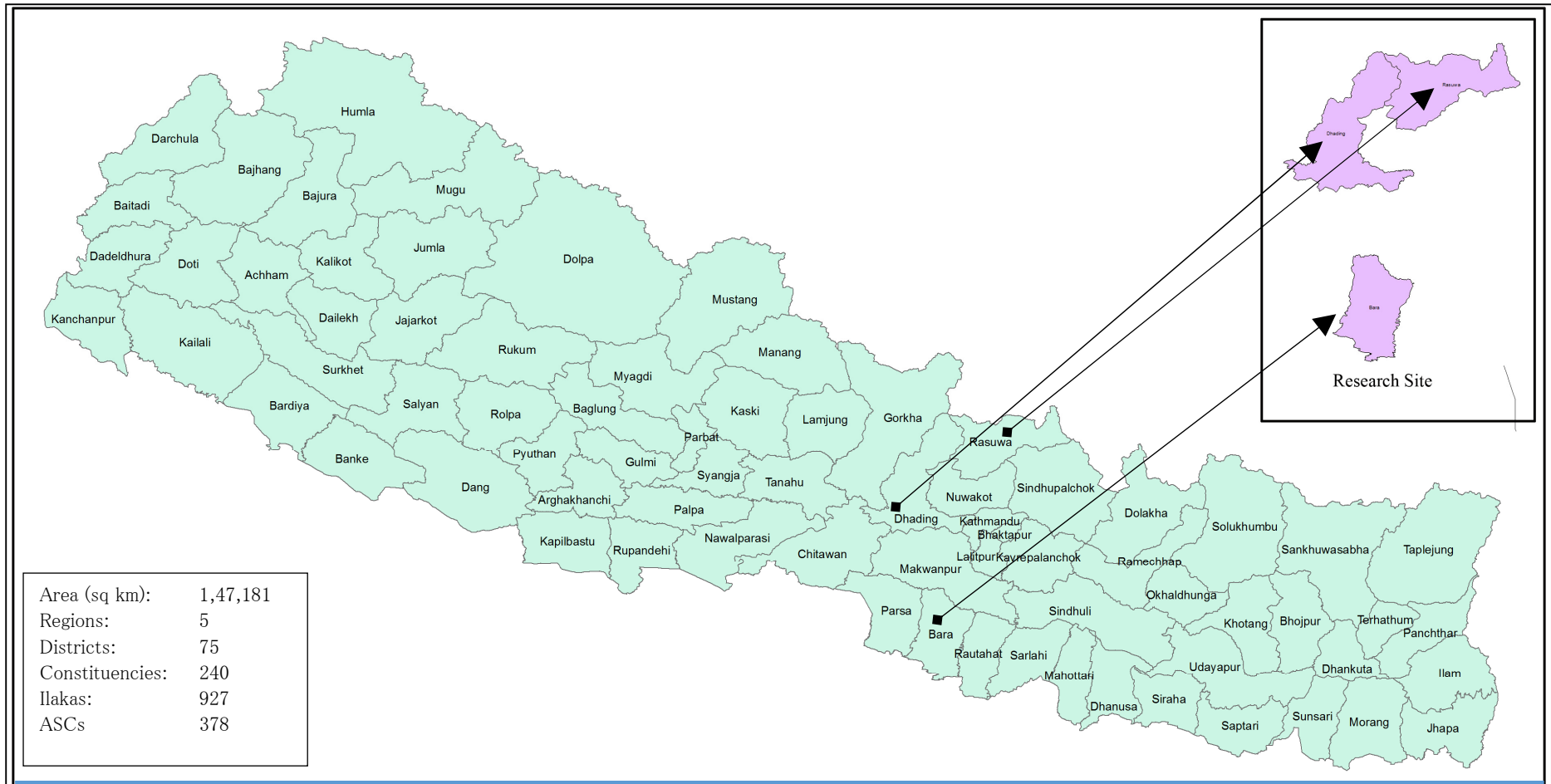
Appendix V

Organizational Structure of Agriculture Service Delivery System in Nepal



Source: MoAD, 2015

Appendix VI



Map of Selected Districts for Study