Annexes

Annex: 1

| Research | Question | nnaires | | | | |
|---------------|---------------|-------------------|--------------|---|---|------------------|
| | | V | | • | ••••• | Tole: |
| | | Ward N0. : | | | | |
| | - | | | | | |
| Age: | | | | | | |
| | | | | | | Occupation: |
| | | | | | | |
| Ma | ale Female | Family size: | | | N | o. of livestock: |
| | | | | | | |
| | | | | | | |
| | ich land do y | | | | | |
| | | b) Bari | | • | | |
| •••••• | ••••• | ••••• | ••••• | ••••• | • | • |
| | ops you culti | | a) Whaat | _ | d) Millot | |
| , | | b) Maize | | | · | |
| e) Bucky | wheat | f) Barley | g) Aı | maranth | h) Sorgh | um |
| i) Vegeta | ables (potato | o, onion, garlic |) j) O | ther | | |
| 3. Food suff | icient for yo | ur family from ow | n production | 1? | | |
| a) 1- | -3 months | b) 4-6 ı | nonths | c) 6-9 month | ns | d) 9-12 months |
| e) S | urplus | | | | | |
| 4. If surplus | s, what you c | lo? | | | | |
| a) s | tore | b) sel | 1 | c) other | | |
| | | | | | | |
| 5. If insuffi | cient, what | you do? | | | | |
| a) l | Purchase | b) bo | orrow | c) other | | |

| 6. Cro | ps cultiva | ited before | but not at | present |
|--------|------------|-------------|------------|---------|
|--------|------------|-------------|------------|---------|

| | Name of the crops | Status | |
|------|-------------------|--------------|-------------|
| S.N. | | Disappearing | disappeared |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

7. Crop production and varieties

| S.N. | Name of crops | Area/ No. | Present | Possible | Variety of |
|------|---------------|-----------|------------|------------------------------|------------|
| | | | Production | extension of cultivable land | crop |
| a | Millet | | | | |
| b | Buckwheat | | | | |
| С | Barley | | | | |
| d | Amaranth | | | | |
| e | Sorghum | | | | |

8. Status of production and utilization of these crops in comparison with past 10 years

| S.N. | Name of crops | Produc | tion | | Reason | Utiliza | tion | |
|------|---------------|--------|--------|-------|--------|---------|--------|-------|
| | | Incre- | Decr- | As | | Incre- | Decr- | AS |
| | | asing | easing | it is | | asing | easing | it is |
| a | Millet | | | | | | | |
| b | Buckwheat | | | | | | | |
| С | Barley | | | | | | | |
| d | Amaranth | | | | | | | |
| e | Sorghum | | | | | | | |

9. What kind of Agronomic practices you do?

| S.N. | Name of | Sourse | Irrigat- | Weed- | Pestic- | Fertiliz | zer | Sole | Mixed | Stora- |
|------|-----------|--------|----------|-------|---------|----------|-------|------|-------|--------|
| | crops | Of | ion | ing | de | | | crop | crop | ge |
| | | Seed | | | | Che- | Orga- | | | |
| | | | | | | mical | nic | | | |
| a | Millet | | | | | | | | | |
| b | Buckwheat | | | | | | | | | |
| С | Barley | | | | | | | | | |
| d | Amaranth | | | | | | | | | |
| е | Sorghum | | | | | | | | | |

10. Favorable season for planting and harvesting.

| S. | Name of | | | | | | Mo | nths | | | | | |
|----|-----------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|
| N | crops | Bai | Jes | Asd | Shr | Bhd | Asj | Ka | Man | Pus | Mag | Fal | Cht |
| • | | | | | | | | r | | | | | |
| a | Millet | | | | | | | | | | | | |
| b | Buckwheat | | | | | | | | | | | | |
| С | Barley | | | | | | | | | | | | |
| d | Amaranth | | | | | | | | | | | | |
| e | Sorghum | | | | | | | | | | | | |

1. Bedding 2.Planting 3.Weeding 4.Irrigation 5.Harvesting 6. Graining process

| 11 | Whatx | ob uov | with | the | residue | of | thece | crone' | 7 |
|-----|----------|--------|-------|-----|---------|-----|-------|--------|---|
| 11. | vv nat v | ou uo | willi | uic | residue | OI. | mese | CLODS | 4 |

a) Compost/ Manure b) Fodder c) Handicrafts d) Other

12. For what purpose do you use these crops?

| S.N. | Name of | Wages | Meal | Sale | Feed | Special | Break- | When y | ou eat | Other |
|------|-----------|-------|------|------|--------|---------|------------------|---------------|---------------|-------|
| | crops | | | | animal | items | Fast/sn- acks | Every- day | Some- time | |
| a | Millet | | | | | | | | | |
| b | Buckwheat | | | | | | | | | |
| С | Barley | | | | | | | | | |
| d | Amaranth | | | | | | | | | |
| e | Sorghum | | | | | | | | | |

13. Whose contribution /participation are more in cultivation?

| S.N. | Age group | Male | Female | Both |
|------|-----------|------|--------|------|
| a | 0-15 | | | |
| b | 15-45 | | | |
| С | 45+ | | | |

14. Problems in cultivation/production?

| S.N. | Name of | Irrigation | Hailstorm | Wind/storm | Animals | Dis | ease |
|------|-----------|------------|-----------|------------|---------|------------|------------|
| | crops | | | | | pathogenic | Non- |
| | | | | | | | pathogenic |
| a | Millet | | | | | | |
| b | Buckwheat | | | | | | |
| С | Barley | | | | | | |
| d | Amaranth | | | | | | |
| e | Sorghum | | | | | | |

1. More 2. Less 3. Non

15. People's perception and status

| S.N. | Name of | Expend- | Grain pr | Grain processing | | Marl | cet demand | |
|------|-----------|---------|----------|------------------|--------|------------|------------|----|
| | crops | iture | Simple | Tedious | value | Increasing | Decreasing | As |
| | | | | | status | | | it |
| | | | | | | | | is |
| a | Millet | | | | | | | |
| b | Buckwheat | | | | | | | |
| С | Barley | | | | | | | |
| d | Amaranth | | | | | | | |
| e | Sorghum | | | | | | | |

| 16. W | hat is people's view in use of these crops? |
|-------|---|
| | a) Millet |
| | |
| | b) Buckwheat |
| | |
| | c) Barley |
| | |
| | d) Amaranth |
| | |
| | e) Sorghum |
| | |

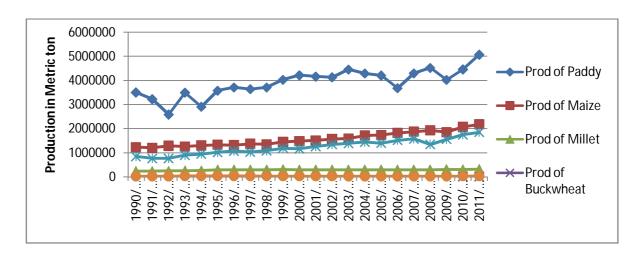
17. What can be done to increase the market value of these crops?

Annex: 2

Questionnaires for Focus Group Discussion (FGD)

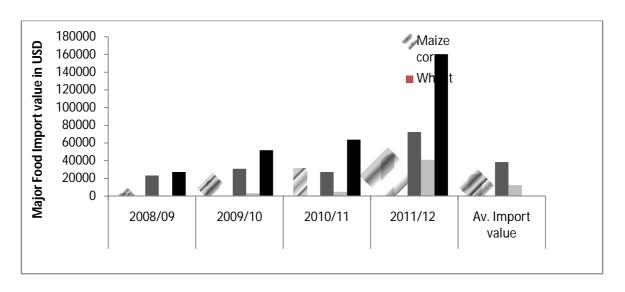
- 1. What may be the possible reasons for food insufficiency by your own production?
- 2. Which food is more preferred in daily diets?
- 3. What is the status of these underutilized crops? Is there any change in the use and production of these crops in then and now?
- 4. What may be the possible reasons for the decrease in these crops?
- 5. What can be done to increase the production, use and value of these crops?
- 6. Do you have any knowledge about the importance of these crops?
- 7. Have you involved in any programmes or trainings related to agriculture?
- 8. What are other uses of these crops beside food?
- 9. Have you got any support from your VDC or any project for the betterment of agricultural production?
- 10. What do you expect from the government for the betterment of your livelihood and food sufficiency?

Annex: 3



(Source: MoAD, Nepal)

Figure 8: Trend of Cereal Crops Production in Nepal (1990/91 to 2011/12)



(Source: Nepal Foreign Trade Statistics, 2008/09-2011/12)

Figure 10: Value of Major Import Crops (2008/09 to 2011/12)

Annex: 4

Conversion factor to compute adult equivalents

| Age group | Adult equivalents | | Age group | Adult equivalents | |
|--------------|-------------------|--------|--------------|-------------------|--------|
| | Male | Female | | Male | Female |
| Under 1 Year | 0.33 | 0.33 | 12-13.99 | 0.96 | 0.84 |
| 1-1.99 | 0.46 | 0.46 | 14-15.99 | 1.06 | 0.86 |
| 2-2.99 | 0.54 | 0.54 | 16-15.99 | 1.14 | 0.86 |
| 3-4.99 | 0.62 | 0.62 | 18-29.99 | 1.04 | 0.80 |
| 4-6.99 | 0.74 | 0.70 | 30-59.99 | 1.00 | 0.82 |
| 7-9.99 | 0.84 | 0.82 | 60 and above | 0.84 | 0.74 |
| 10-11.99 | 0.88 | 0.78 | | | |

Source: Gamba, P., 2005 as per WHO

Photo plates



Picture 1: Amaranth grown in study area



Picture 2: Cemented tank to collect

Rain water



Picture 3: A child working in maize field



Picture 4: Picture showing Bari and Khoriyan



Picture 5: Small beds of millet questions.



Picture 6: A respondent answering



Picture 7: Focus group discussion machine



Picture 8: Traditional grinding



Picture 9 & 10: graining and processing of Millet



Picture 11: Tomato farming alcohol



Picture 12: Method to produce local (By: Kamal Hari Bhandari)