PARTICIPATORY AND NON-PARTICIPATORY MODES OF NUTRITION COMMUNICATION IN A DEVELOPING COUNTRY: A CASE STUDY OF NEPAL

VOLUME II: BIBLIOGRAPHY AND APPENDICES

by

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Participatory and non-participatory modes of
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APPENDIX 1

Summary of activities carried out by Nutritious Food Program (NFP)

The main activity carried out through the various units are as follows.

Health and Nutrition Unit
The Health and Nutrition Unit is designed to distribute nutritious food especially to pregnant and lactating women, and to children. Previously, nutritious food was distributed through the Health Post, and Group Feeding Programs. Since 1992 only the Health Post Program is operational, and the Group Feeding Program is discontinued by the donor, the WFP, on the ground that the program was not running effectively.

Under the Health Post Programs, nutritious food is distributed to pregnant and lactating women, and children of less than 5 years at the recommendation of the Health Post personnel, while the Group Feeding Program, based on the nutritional assessment, provide food to a group of malnourished children and mothers.

It is assumed by the program that the Health Post Program is an incentive to the pregnant and lactating women and their children to come to the Health Post regularly and avail of the preventive services provided by the Health Pos. such as immunisation, family planning, and health and nutrition.

Primary and Technical Education Unit
Under the Primary and Technical Education Unit, nutritious food is distributed to primary school children and technical schools students. Food is distributed to the primary school children in form of a tiffin.¹ This tiffin is considered as a means of encouraging school enrolment, decreasing the number of daily absentees and dropouts, and enhancing the overall pass rate of classes. On the other hand, the amount of food provided to the technical schools
is considered as a support to them in saving moneys from food for their extension and development.

**Welfare Organisation and Child Care Centre Unit**

Under the Welfare Organisation and Child Care Centre Unit (WOCCCU), food is distributed to the children of Bal Mandir (Orphanage) and child care centres. Besides this, it also distributes foods to social welfare organisations. It is believed that the food distributed to welfare organisations may help them save some money from food so that they can use it in their extension and development.

**Women's Development Unit**

The Women's Development Unit (WDU) is specifically designed to distribute foods to the participants of the women teachers' training centres and participants of the women literacy and skill development program as well. It is hoped that such food distribution will help women's training organisations save some money from food which may be used in their development and extension.

In terms of food distributions to numbers of beneficiaries, NFP has set a distribution quota of 100,000 of which 70,000 goes to school students of 500 primary school; 21000 to 70 health post; 5000 to 110 day care centres; and 4000 to 50 welfare organisations.

From 1972 to 1978, NFP conducted the GFP under which nutritious foods such as dried skim milk, wheat soya blend or wheat soya flour, butter oil and the like were distributed to malnourished children, and pregnant and lactating women. Similarly, from 1979, it also expanded its food distribution activities in the primary schools, day care centres, and welfare organisations.

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1. A light meal provided during or shortly after midday.
2. Bal Mindir is governed by the Nepal Al Sangathan in each district of the country.
Beginning 1990 to date, NFP has been implementing its food distribution activities basically to strengthen the health and education sectors under the WFP program called Assistance for Basic Needs Support Program in Health/Nutrition and Education. Under this program, women trainees from the skill training program and teacher's training program, and also the trainees (both men and women) from the vocational and technical education centres benefit. Currently, this program is distributing wheat flour, butter oil, sugar and rice to beneficiaries.
APPENDIX 2

Summary of activities carried out by Joint Nutrition Support Program (JNSP)

The JNSP program activities of the different participating sectors were as follows:

Ministry of Health (MOH)

The MOH program activities consisted mainly of growth monitoring, infant and young child feeding, immunisation, parasite infestation and diarrhoeal disease control, management of severe protein energy malnutrition, care of pregnant women, control of anaemia and iodine deficiency, and control of vitamin A deficiency and xerophthalmia.

The above activities in each program district were supposed to be carried out by the DNO in co-ordination with the District Health Post (DHP), CNWs and the JNSP staff located at the central level under the Nutrition Section of the MOH.

Ministry of Agriculture (MOA)

The major focus of the MOA’s activities in JNSP was to raise local yields, production of nutritious non cereals for household consumption and income generation. Thus, the activities involved were the training of extension workers, teachers and farmers particularly on different aspects such as kitchen gardens, mushroom cultivation, beekeeping, fish farming, poultry raising, small animals raising, fruit and vegetable preservation and processing and food storage. Besides this, in order to encourage farmers to produce and consume nutritious food, after their training, they were given various inputs such as seeds for kitchen gardens, fruit saplings, fingerlings, chicks, small animals, and bee hives etc. These inputs were provided subsidised or free depending on the situation. Similarly, use of appropriate technology such as biogas, community food processing, and techniques for reduction of post harvest losses were taught and demonstrated.
All the JNSP activities in the target district were carried out by the District Agriculture and Livestock Development Office (DALDO) in conjunction with DNO, Junior Technicians (JT), Junior Technical Assistants (JTA), and the staff members of the Nutrition Section (NS), of the Central Food Research Laboratory (CFRL), MOA. The NS of the CFRL worked as the co-ordinating agency for agriculture component of the JNSP.

Ministry of Education (MOE)

MOE’s major focus was on working to eliminate illiteracy especially among women. Its strategy sought to provide nutrition education for young children and pregnant women. Its main activities included the introduction of functional literacy and numeracy programs, health and nutrition education in primary schools, and formal and non-formal education programmes with emphasis on health and nutrition-related components. Similarly, preparation and testing of new nutrition/health components for teacher’s training and school curricula, preparation of supplementary readings for formal and non-formal education, school feeding program, and income generation activities such as poultry and vegetable gardens, were also included as program activities.

In order to efficiently carry out the above activities at the central level, a nutrition unit was created in the MOE. At the district level there was a District Education Officer (DEO) in each program district who was responsible for carrying out the program activities with the cooperation of the subordinate staff such as an assistant DEO, school supervisors, and other staff. At the community level, this part of the program was carried out by the school teachers.

Ministry of Local Development (MOLD)

In view of protecting women’s health and nutritional status during their child bearing age, promoting their status as active and independent earners, and empowering them as decision
makers at both family and community level, the JNSP launched its program in line with the women’s development activities carried out by the MOLD.

Under the Women’s Development Section (WDS) of MOLD, the JNSP integrated its activities into the Production Credit for Rural Women Project (PCRW). The main activities involved in the JNSP in terms of women’s development were the education of women in child care practices, health and nutrition, sanitation/hygiene, improvement of the productivity, and credit facility for income generating activities.

In order to carry out the JNSP program, WDS established a nutrition cell [unit], and all the activities regarding of JNSP at the central level were carried out through the nutrition cell. At the district level, Local Development Officer (LDO) and Women’s Development Officer (WDO), in co-operation with the other JNSP participating agencies were involved in health, agriculture, education, and income generating activities of the program.

At the community level, the program activities were especially carried out by the women workers/CNWs.
APPENDIX 3

Sample posters developed by Vitamin A Child Survival Project (VACSP)
APPENDIX 4

Summary of activities carried out by National Vitamin A Program (NVAP)

Distribution of Vitamin A capsules
In line with the VACSPs recommendation, the vitamin A capsule distribution is the major activities of the NVAP. It distributes vitamin A capsules to children twice a year (normally March/April and October/November) as dietary supplementation.

Nutrition Education
The NVAP at grass-root level conducts nutrition education to mothers through the Village Health Workers (VHWs), Community Health Volunteers (CHVs), and Female Community Health Volunteers (FCHVs). Similarly, primary and secondary school children are given nutrition education by their teachers.

Training of VHWs, CHVs, FCHV's, and School Teachers, and Political Leader
A short term training course is conducted by the program central office to train the VHWs, CHVs, FCHV, school teachers and political leaders who are supposed to disseminate the program message at the grass-root level.
APPENDIX 5

Summary of activities carried out by Worldview/Nutritional Blindness
Prevention Pilot Project (NBPPP)

Baseline Survey
In November-December, 1990, 24 survey interviewers (22 from project area residents and 2 from the project itself) were sent to collect baseline information on 6 VDCs based on random survey basis. Based on the information collected Khoplang and Mirkot were finally selected as pilot project areas.

Recruitment of Women’s Volunteers
14 Women Volunteers (WVs) were locally recruited to establish a channel of communication for carrying out the project activities in both Khoplang and Mirkot VDCs.

Formation of Mothers’ Group
Local mothers’ group in each village was formed through the WVs in order to carry out community development projects, particularly those related to the project activities.

Training / Workshop
Before WVs were fully employed and assigned to their respective duties, they were provided with 3 weeks training on general information on nutrition, cooking methods, childhood diseases and its prevention, primary health care and the like. The broad objective of this training was to eventually train the mothers’ group. Similarly, during the entire project period, different workshop/training were conducted for various people such as mothers, local leaders, and school teachers etc. Thus, a total of 539 local leaders, elites, influential villagers, progressive farmers, school teachers, and mothers were provided with training.
Detection of Nightblind Cases
During the project period 333 nightblind cases were detected and treated.

Kitchen Gardening Program
Families were motivated and encouraged to have vegetable gardens with constant follow up activities of the WVs. 4188 kitchen garden follow-ups were made by WVs during the project period.

School Activities
School activities such as developing a demonstration garden of vegetables, and frequent events such as colloquies and debates on the messages of the project were introduced in 6 schools (2 high schools and 4 primary schools) since July 1991. The participants of such events were given small packets of seeds of vitamin 'A' rich vegetables, writing-books and pencils as incentive prizes.

Video Program
A video program was screened in various villages to disseminate information and messages on nutrition and health. Altogether 349 video shows were organised, and the number of audiences watching these was estimated at 39,750.

Radio Spots
During late 1991, radio spots were introduced. Two radio spots of one minute and a half minutes duration were broadcasted for more than two months.

Exhibition
Two exhibitions on vitamin ‘A’ rich green leafy vegetables and yellow fruits were held at a primary school’s premises in 1991 and 1992. Incentive prizes were also awarded to the best three participants in all varieties of vegetables and fruits displayed in the exhibition.
Eye Camp

Two eye camps were organised in 1992 and 1993 to provide eye care services to the household target groups with the help of Himalayan Eye Care Foundation. A total of 750 eye patients were provided with medical services during these two eye camps.

Water/Irrigation Program

For some water problem-affected mid-hill dwellers the project constructed irrigation outlets from perennial sources of water for cultivation of green vegetables in their kitchen gardens.

Drinking Water Project

In order to alleviate drinking water problems in some of the project areas, drinking water sub-projects were implemented during the project period in both the Khoplang and Mirkot VDCs.
Appendix 6

Summary of activities carried out by Multisectoral Training in Nutrition for the Control of Vitamin A Deficiency

Sectoral Training

Training on food and nutrition is provided to all sectoral ministries involved in nutrition activities such as Ministry of Health (MOH), Ministry of Agriculture (MOA), Ministry of Education (MOE), and Ministry of Local Development (MOLD).

In MOH, this project trains master trainers at the central level and trainers at the community level. The community level trainers are the volunteer health workers, and community health volunteers and paramedics.

In MOA, the training program covers all people concerned with the agriculture programs from the regional level to the community level. Thus, it trains the District Agriculture Development Officers (DADOs) at regional level while some staff are trained at the district level. At the same time, at the community level, leader farmers and farmers are provided with skill-oriented training.

Under the MOE, the training program focuses primarily on adult literacy areas. Therefore, it trains master trainers, trainers, and facilitators of the literacy campaign program of the country. While conducting adult literacy classes, the facilitators integrate concepts of nutrition and vitamin A, thus disseminating the message to a large number of villagers.

In MOLD, WDOs and WWs are provided with training on nutrition and vitamin A to reach to the women’s groups in the community.
Curriculum Development

Curriculum materials on nutrition are developed by the project for the sectoral ministries' training, and for primary, secondary and university level education.

Development of Training Materials

On the basis of the developed curriculum, the project develops prototype teaching-reading materials and visual aids. Both curriculum and training materials including audio-visual aids are field tested.
APPENDIX 7
Ecological Regions of Nepal

- High hill
- Hill
- Terai (Plain areas)
- Kathmandu Valley
APPENDIX 8

The questionnaire for household survey (Questionnaire Interview) in three districts of Nepal

Survey districts:
Nawalparasi
Gorkha
Ramechhap
Questionnaire

Date of Interview ______________

Name of Village _______________ Questionnaire No.____

IMPORTANT NOTE: Before starting off with the questions contained in this questionnaire, the researcher will inform the respondent the following points in regard to the purpose of this questionnaire interview and concomitant ethical issues.

THIS INTERVIEW IS DESIGNED TO INVESTIGATE PRACTICE AND PATTERNS OF THE MODE OF NUTRITION COMMUNICATION MORE LIKELY TO EMPOWER PEOPLE TO SECURE BETTER NUTRITION AND HEALTH. HENCE, ANY PERSONAL OR INDIVIDUAL INFORMATION OR OPINION OBTAINED IN THIS INTERVIEW WILL BE USED STRICTLY IN A MANNER TO MAINTAIN CONFIDENTIALITY AND PERSONAL RIGHTS.

PART A- General inquiry about personal knowledge of respondent in regard to nutrition and food.

(General inquiry would be made using mostly projective questions based on the various photographs and posters. For this purpose, all the photographs and posters will be numerically numbered corresponding to the respective questions. Hence, before starting off with asking the projective questions, the interviewer will make sure that he/she has appropriate poster/picture to show to the respondent. It is expected that this approach will be effective in starting off the interview with some easy, impersonal questions that may help offset some sorts of fear and shyness of the respondent in answering the questions)

(The first picture/poster will contain a photograph of two different children: healthy and malnourished. The respondent will be asked to differentiate the health condition of both children based on their physical appearances.)
1. I have a picture (picture no.1) of two children with different physical appearances, what do you think is the difference between them in terms of their physical conditions?


2. Among the various problems listed below, which one do you think is the most important cause for ill-health in children?

- Problems of food availability 1
- Problems of right foods 2
- Problems of proper food preparation 3
- Problems of sanitation and hygiene 4
- Problems of maternal care 5
- Combination of all/or any of the above 6
- Other (Specify) 7


3. Why do you think the one you mentioned is the most important cause?


(The following questions are designed to help identify the knowledge of nutritious food of the respondent. Therefore, pictures containing basic food items such as body-building foods (milk, meat, and beans groups), protective foods (fruit and vegetables groups) and
energy foods (cereal-grain, and fat and oil groups) will be shown to the respondent in the process of asking questions

Question no. 4 to 12 below deals with body-building foods

4. What do you think, in general, of these foods contained in this picture (picture no.2)?

Not essential Very essential

at all 1 2 3 4 5

5. Among these foods shown in the picture, which food item/s do you normally eat, how frequently and why?

(Daily = 9; Two to three times a week = 8; Weekly = 7; Fortnightly = 6; Two to three times a month = 5; Monthly = 4; Every two to three months = 3; Half yearly = 2; Yearly = 1)

<table>
<thead>
<tr>
<th>Food Items</th>
<th>Frequency of Intake</th>
<th>Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
<tr>
<td>Cheese</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
<tr>
<td>Goat/Lamb Sheep</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
<tr>
<td>Pork</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
<tr>
<td>Buffalo</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>
6. Among these food item/s shown in the picture, which food/s do you frequently eat if readily available?

- Chicken 1
- Eggs 2
- Milk 3
- Cheese 4
- Goat/Lamb/Sheep 5
- Pork 6
- Buffalo 7
- Beans 8
- Ground nuts 9
- Fish 10
- Other items (Specify) 11

7. Among these food items shown in the picture, which particular food item/s are you not permitted to eat culturally and socially, explain why?
8. Which food items in the picture are viewed as essential for health according to the tradition and customs of your community and why?

(Question no. 9 to 12 below deals with protective foods)

9. What do you think, in general, of these foods contained in this picture (picture no. 3) in terms of your body requirement?

<table>
<thead>
<tr>
<th>Not essential at all</th>
<th>Very essential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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<tr>
<td>3</td>
<td>4</td>
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<td>5</td>
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</tbody>
</table>

10. What particular types of fruits do you normally eat, how frequently, and why?
(Daily = 9, Two to three times a week = 8; Weekly =7; Fortnightly = 6; Two to three times a month = 5; Monthly = 4; Every two to three months = 3; Half yearly = 2; Yearly =1)

<table>
<thead>
<tr>
<th>Type of Fruit</th>
<th>Frequency of Intake</th>
<th>Why</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
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</tbody>
</table>

11. What particular types of vegetables do you normally eat, how often and why?
(Daily = 9, Two to three times a week = 8; Weekly =7; Fortnightly = 6; Two to three times a month = 5; Monthly = 4; Every two to three months = 3; Half yearly = 2; Yearly =1)
12. Do you have any specific fruit/s and vegetable/s you do not like to eat or do not eat at all for some reason/s?
   - Yes  1
   - No  2

(If Yes, ask:) Can you specify the name of such fruits and vegetables, and also the reason/s for not eating them?

Name of fruit  Name of vegetable  Reason for not eating

13. What do you think, in general, of those foods contained in this picture (picture no.4)?

   Not essential  Very essential
   at all          essential
   1  2  3  4  5

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14. Among those foods shown in the picture, which food item/s do you normally eat every day, and why?


15. Apart from the food item/s eaten every day, what other foods shown in the picture do you eat, how frequently, and why?

(Two to three times a week = 8; Weekly = 7; Fortnightly = 6; Two to three times a month = 5; Monthly = 4; Every two to three months = 3; Half yearly = 2; Yearly = 1)

<table>
<thead>
<tr>
<th>Food Items</th>
<th>Frequency of Intake</th>
<th>Why?</th>
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<td>1 2 3 4 5 6 7 8</td>
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<td>1 2 3 4 5 6 7 8</td>
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<td>1 2 3 4 5 6 7 8</td>
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<td></td>
<td>1 2 3 4 5 6 7 8</td>
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</tbody>
</table>

16. What is/are the main reason/s for not eating these every day?


17. Do your family members eat together at one time at home when the food is ready to serve?

- Yes 1
- No 2

(If No, ask:) What is the usual pattern of household food distribution?


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18. Do you think that there are some commonly available local foods presently not utilised in the village, but have potential usefulness in overcoming village food security?
- Yes 1
- No 2

(If Yes, ask:) Can you give some example of these foods, and explain why they are useful to local people?

19. What foods do you traditionally give to the following people to keep them healthy, and how frequently?
(Breakfast=1; Lunch=2; Tiffin=3; Dinner=4; Other: specify=5)

<table>
<thead>
<tr>
<th>Food Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 0-5 Yr. Children</td>
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<td></td>
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<tr>
<td>- &gt; 5 Yr. Children</td>
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<tr>
<td>- Lactating &amp; pregnant Women</td>
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</tbody>
</table>
20. Do you have some specific traditional foods that you offer as supplementary foods to children, and lactating women?

- Yes 1
- No 2

(If Yes, ask:) Can you give some examples of the type of food you offer and why?

<table>
<thead>
<tr>
<th>Types of foods</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 Yr. Children</td>
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</table>

| 0-5 Yr. Children |                  |
|                 |                  |
|                 |                  |

| > 5 Yr. Children |                  |
|                 |                  |
|                 |                  |

| > 5 Yr. Children |                  |
|                 |                  |
|                 |                  |
21. If you feel that your child is not growing properly and is looking like sick and tired all the time, what types of food you would think help resolve this problem?

22. If you have a problem of maintaining good health of your lactating women or growing children, who and where do you go to seek for advice in a first place?

23. In general, what do you think of such advice in terms of their effectiveness in solving problems?

PART B- Specific inquiry about the recently on-going project.

(The interviewer, before starting off with the following questions, will inform the respondent that he/she is going to ask some questions on the National Vitamin A Program/Nutritional Blindness Prevention Pilot Project/Production Credit for Rural Women)
24. Are you familiar with the activities of the National Vitamin A Program/Nutritional Blindness Prevention Pilot Project/Production Credit for Rural Women?

- Yes 1
- No (Go to Question no. 40) 2
- (If Yes, ask:) What do you think the project is meant for (the project theme)?

25. Can you explain in brief the activities of this project?

26. (a) Who is benefiting from the project and why?

(b) Who is not benefiting from the project and why?

27. Are you directly involved as one of the beneficiaries in this project?

- Yes 1
- No 2

(If No, ask:) Why are you not?
28. Have you taken part in any process of the project design, development and implementation?
   - Yes 1
   - No 2
   (If Yes, ask:) How and when?

(Go to Question no. 30)

29. Why you have not taken part?

30. What are the project approaches to motivate the beneficiaries to involve in its activities?

31. Do you personally think that these approaches are quite stimulating to you?
   - Yes 1
   - No 2
   (If Yes, ask:) How do you think so?

32. What are the modes of communication system employed in this project?
(Do not read the following for the respondent, just check the appropriate ones below, as per the answer of the respondent)
33. Of the various communication media used in this project (e.g. one-to-one communication, audio and video, poster/pamphlet, and folk song etc.), which media do you think led you to participate in the project, and why?

34. Which do you think is the most important, can you explain in priority order?

<table>
<thead>
<tr>
<th>Medium/media</th>
<th>Priority Order</th>
<th>Why?</th>
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<tbody>
<tr>
<td></td>
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35. Do you think that the information/advice brought to you by the project's medium/media are quite clear to your understanding?

- Yes 1
36. Why do you feel that the information/advice are not clear?

37. What feelings do you have about the volunteers and project workers coming to talk with you regarding the project activities?

38. Based on your personal experience and observation, what do you think about the contribution of the project to the village and village people?

39. Do you believe that you have learned something from this project?
   - Yes 1
   - No (Go to Question no. 40) 2

(IF Yes, ask:) What have you learned, explain?
40. Do you think that you have been practising those things you have already learned from the project in your practical life?

- Yes 1
- No 2

(If Yes, ask:) How?

PART C- Inquiry about other projects.

(The interviewer, before starting off with the following questions, will inform the respondent that he/she is going to ask questions on other projects, if any.)

41. Other than this project, did you know of any other projects in food and nutrition over the past five years?

- Yes 1
- No (Go to Question no.46) 2

(If Yes, ask:) What was/were the name/s of the project/s, and the year of implementation and completion)

42. Do you remember what was the purpose of these projects? (theme of these projects)?

- Yes 1
- No 2

(If Yes, ask:) Can you explain?

- Project no. A ____________________________
43. What were the modes of communication system employed in these project/projects? (Do not read the following for the respondent, just check the appropriate ones below, as per the answer of the respondent)

<table>
<thead>
<tr>
<th>Project</th>
<th>Project</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>

- One-to-one discussions
- Group Meetings/Consultations
- Use of audio (e.g. cassette tapes, radio)
- Use of visual aids (e.g. slides, video-tapes, film-projectors etc.)
- Posters/Pamphlets
- Billboards
- Use of local folk songs
- Use of local folk dance/stage play
- Others (Specify)

44. What do you think are the best ways of communicating with you? Here are some possible ways of communication. Which one/s would you prefer, and why? (Check the appropriate number that represents your preference as 1 for first preference, 2 for second preference and so on.)

<table>
<thead>
<tr>
<th>Preference</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- One-to-one discussions
- Group Meetings/
Consultations 1 2 3 4 5 6 7 8
- Use of audio (e.g., cassette tapes, radios) 1 2 3 4 5 6 7 8
- Use of visual aids (e.g., slides, video-tapes, film-projectors etc.) 1 2 3 4 5 6 7 8
- Posters/Pamphlets 1 2 3 4 5 6 7 8
- Billboards 1 2 3 4 5 6 7 8
- Use of local folk songs 1 2 3 4 5 6 7 8
- Use of local folk dance/stage play 1 2 3 4 5 6 7 8
- Others (Specify): 1 2 3 4 5 6 7 8

45. How would you rate these projects in terms of their help in changing your own family eating practices and practices of other people in the village?

(a) Your own family eating practices:

<table>
<thead>
<tr>
<th>Not useful</th>
<th>Very useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>at all</td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

- Project no. A 1 2 3 4 5
- Project no. B 1 2 3 4 5
- Project no. C 1 2 3 4 5
(b) Practices of other people in the village:

<table>
<thead>
<tr>
<th>Not useful at all</th>
<th>Very useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project no. A</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Project no. B</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Project no. C</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

(If the response is *Very useful*, then probe by asking:) Can you give some examples of the change in eating practices of your own family and other people in the village?

46. Do you think that the change in eating practices is still on going?
   - Yes 1
   - No 2

   (If No, ask:) How long did the change last for?
   - Under 1 Yr. 1
   - 1-2 Yr. 2
   - 3-4 Yr. 3
   - 5-Over 4

47. When the project comes to an end, how long do you think the activities brought to the village by the project last and why?

48. In your opinion, what should be the best ways for keeping the project activities last long for the benefit of the village people?
49. Please indicate your own views in each of the following statements in relation to nutrition communication for bringing about changes in nutritional practices of the village people. (SD= Strongly Disagree; D= Disagree; N= Neutral; A= Agree; SA= Strongly Agree)

- The village communities simply need help from experts in resolving the problems, with some suggestions and information.  
  
<table>
<thead>
<tr>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

- Experts alone can bring about changes in the villages.  

<table>
<thead>
<tr>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

- Villagers can bring about changes by themselves.  

<table>
<thead>
<tr>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

- Villagers can engage in dialogue with nutrition experts or nutrition workers in bringing about changes.  

<table>
<thead>
<tr>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

50. Have you ever participated in the village development work over the last five years?

- Yes  
  
  - No (Go to question no. 52)  

  1  
  
  2
51. How did you come to participate?

(Probe, both non-voluntary or Voluntary)

52. What is the usual method of dissemination of information in your village by the government and non-government organisations in regard to food, nutrition and health? Check the Following:

- One-way method: Not involving consultations, meetings, discussions between organisations and villagers in information design and dissemination.

- Two-way method: Involving consultations, meetings, discussions between organisations and villagers in information design and dissemination.

- Other (Specify) ________________________________

53. Do you believe that you should be consulted in the design and dissemination of information/messages?

- Yes 1

- No 2

(If Yes, ask:) Why?

54. Which one do you think would be most appropriate way of consultation with you?
55. In view of your existing village conditions, what are the best ways of communications to bring about people's participation to food and nutrition program?

56. Which one of the following statement comes closest to your own feeling and beliefs:

- Health and nutrition messages should solely be designed and disseminated by the experts alone as the local people do not have any expertise in this field.  

- Local people's opinion and participation should be included in the design and dissemination of messages as I believe that the local people also are the experts of the local conditions and traditional practices.

- Neither of the above.

(If Neither of the above, ask:) why?
57. Respondent's Personal Characteristics:

<table>
<thead>
<tr>
<th>Age</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>1</td>
</tr>
<tr>
<td>25-29</td>
<td>2</td>
</tr>
<tr>
<td>30-34</td>
<td>3</td>
</tr>
<tr>
<td>35-39</td>
<td>4</td>
</tr>
<tr>
<td>40 and Over</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Caste</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brahmin</td>
<td>1</td>
</tr>
<tr>
<td>Chettry</td>
<td>2</td>
</tr>
<tr>
<td>Baishya</td>
<td>3</td>
</tr>
<tr>
<td>Shuddra</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Religion</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>1</td>
</tr>
<tr>
<td>Buddhist</td>
<td>2</td>
</tr>
<tr>
<td>Islam</td>
<td>3</td>
</tr>
<tr>
<td>Christian</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
</tr>
</tbody>
</table>
Occupation:

Professional/Technical workers 1
Administrative/Clerical workers 2
Sales workers 3
Farm fish workers 4
Production labour workers 5
Others 6

Total no. of Children: 

<table>
<thead>
<tr>
<th>No. of Male children under 5 or 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of Female children under 5 or 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Were you or anybody of your family member pregnant in the last 12 months?

- Yes 1
- No 2

Did you or anybody of your family member breast feed the baby?

- Yes 1
- No 2

Did you or anybody of your family member breast-feed the baby?

- Yes 1
- No 2

Marital status:

<table>
<thead>
<tr>
<th>Single</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Separated</td>
<td>3</td>
</tr>
<tr>
<td>Divorced</td>
<td>4</td>
</tr>
<tr>
<td>Widowed</td>
<td>5</td>
</tr>
<tr>
<td>Others (de facto etc.)</td>
<td>6</td>
</tr>
</tbody>
</table>
Education:

Completed Postgraduate
  Degree/Diploma 1
Completed Certificate Level 2
Completed High school/ Vocational
  Secondary School 3
Completed Primary School 4
Completed Elementary School 5
Other 6

Language spoken, and literacy level (RW= can read and write, RNW= can read but not write, NRW= Cannot read and write)

<table>
<thead>
<tr>
<th>Language Spoken</th>
<th>Level of Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nepali</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Newari</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Bhojpuri</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Maithali</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Hindi</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Tharu</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Gurung</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Rai</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Limbu</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Magar</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>English</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Others</td>
<td>RW RNW NRW</td>
</tr>
</tbody>
</table>
House Structure:
Stone/Brick 1
Wooden 2

Communication equipment at home:
Radio 1
Television 2
Telephone 3
Others (Specify) 4

Communication equipment at the village:
Radio 1
Television 2
Telephone 3
Others (Specify) 4
APPENDIX 9

Questionnaire for government and non-government officials
Questionnaire No. _____
Date of Interview _______________________________________

Name of the Organisation ____________________________________

IMPORTANT NOTE: Before starting off with the questions contained in this questionnaires, the researcher will inform the respondent the following points in regard to the purpose of this questionnaire interview and concomitant ethical issues.

THIS INTERVIEW IS DESIGNED TO INVESTIGATE PRACTICE AND PATTERNS OF THE MODE OF NUTRITION COMMUNICATION MORE LIKELY TO EMPOWER PEOPLE TO SECURE BETTER NUTRITION AND HEALTH. HENCE, ANY PERSONAL OR INDIVIDUAL INFORMATION OR OPINION OBTAINED IN THIS INTERVIEW WILL BE USED STRICTLY IN MANNER TO MAINTAIN CONFIDENTIALITY AND PERSONAL RIGHTS.

1. How important are food and nutrition problems for development of Nepal?
______________________________________________________________________

2. Do you think nutrition problems are one of the major problems inhibiting national development?
   - Yes 1
   - No 2
   (If Yes, ask) How?
______________________________________________________________________

(If No, go to Question no. 4)
3. If you think, nutrition problems are the major problems inhibiting national development, what main factors do you think may help alleviate these problems?

____________________________________________________________________________________

4. Does the National Planning commission include nutrition as the development indicator?

- Yes 1
- No 2

(If Yes, ask:) Please elaborate

____________________________________________________________________________________

5. Do you believe that communications can play a vital role in informing people about the possible ways of combating malnutrition?

- Yes 1
- No 2

(If No, ask:) Why?

____________________________________________________________________________________

(Go to Question no. 8)

6. What role do you think communications can play in informing people about the possible ways of combating malnutrition?

____________________________________________________________________________________
7. What do you think should be the communication policy in informing better nutrition to people?

8. Are you familiar with the National Communications Policy, 1992?
   - Yes 1
   - No (Go to Question no. ) 2

9. Do you think that this policy has direct bearings on food and nutrition communications?
   - Yes 1
   - No 2
   (If No, ask:) Why?

10. Why do you think it has direct bearings on food and nutrition communications?

11. As you might be aware, the Government's Eighth National Development Plan (1992-1997) has indicated Government's firm commitment on the improvement of the nutritional status of the people. To realise this, various policy measures have been spelled out in the Plan such as household food security for the poor, multi-sectoral education program for balanced diets and preparing nutritious food, and supply of micro-nutrients. In this context, what do you think should be the role of communications in informing or
advising people of the Government policy measures as well as their developmental goals?

12. What do you think should be the main communication strategies for informing/advising better nutrition to the people?

13. Among the various existing communication media (e.g. one-to-one communication, audio and video, poster/pamphlet, billboard, newspaper, and folk song etc.), which media do you think are the useful ones in informing people, and why?

14. Which do you think is the most important, can you explain in priority order?

<table>
<thead>
<tr>
<th>Medium/media</th>
<th>Priority Order</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
15. What do you think are the best ways of communicating to village people? Here are some possible ways of communication. Which one/s would you prefer, and why? (Check the appropriate number that represents your preference as 1 for first preference, 2 for second preference and so on.)

<table>
<thead>
<tr>
<th>Preference</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-to-one discussions</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Group Meetings/Consultations</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Use of audio (e.g. cassette tapes, radios)</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Use of visual aids (e.g. slides, video-tapes, film-projectors etc.)</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Posters/Pamphlets</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Billboards</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Use of local folk songs</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Use of local folk</td>
<td></td>
</tr>
</tbody>
</table>
16. Based on your common observation, what is the usual method of dissemination of information in the village by the government and non-government organisations in regard to food, nutrition and health?

17. Do you believe that the villagers should be consulted in the design and dissemination of information/messages?
   - Yes 1
   - No 2

   (If Yes, ask:) Why?

18. Which one do you think would be most appropriate way of consultation with the villagers?
   - Inviting them to a group meeting 1
   - Making them members of a consultative committee 2
   - Involving them in interpersonal discussions 3
   - Consulting with some one who puts views of the
19. In your view, what would you call a nutrition communication as:
(a) participatory?

(b) non-participatory?

20. In view of your existing village conditions, what are the best ways of communications to bring about people's participation to food and nutrition program?

21. Which one of the following statement comes closest to your own feeling and beliefs:
   - Health and nutrition messages should solely be designed and disseminated by the experts alone as the local people do not have any expertise in this field.
   - Local people's opinion and participation should be included in the design and dissemination of messages as I believe that the local people also are the experts of the local conditions and traditional practices.
   - Neither of the above.

   (If Neither of the above, ask:) why?
22. Do you think that the village people are influenced by the commercial advertisements being aired/televised every day by the commercial companies to promote their products such as beer, cigarette, soft drinks etc.?

- Yes 1
- No (Go to Question no 29) 2

(If Yes, ask:) How and why?

23. Based on your experience and observation, how would you assess the increase in level of consumption of commercial foods by the village people over the past five years? Please check from the following:

- Less than per cent 1
- 25 to 50 per cent 2
- 50 to 75 per cent 3
- 75 to 100 per cent 4
- 100 Over 5

24. Apart from the commercial advertisements, do you think that there are other contributing factors promoting commercial goods in the villages?

- Yes 1
- No 2

(If Yes, ask:) What are they?
25. What changes will you see occurring in nutrition communication in future?

26. Respondent's Personal Characteristics:

Age:

- Under 25: 1
- 25-29: 2
- 30-34: 3
- 35-39: 4
- 40 and Over: 5

Sex:

- Male: 1
- Female: 2

Caste:

- Brahmin: 1
- Chettry: 2
- Baishya: 3
- Shuddra: 4

Religion:

- Hindu: 1
- Buddhist: 2
- Islam: 3
- Christian: 4
- Others: 5
<table>
<thead>
<tr>
<th>Occupation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Staff</td>
<td>1</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>2</td>
</tr>
</tbody>
</table>

Position title: ________________________________

Department: ________________________________
APPENDIX 10

Questionnaire for community leaders

Survey districts:
Nawalparasi
Gorkha
Ramechhap
IMPORTANT NOTE: Before starting off with the questions contained in this questionnaires, the researcher will inform the respondent the following points in regard to the purpose of this questionnaire interview and concomitant ethical issues.

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1. Do you think that there are some commonly available local foods presently not utilised in the village, but have potential usefulness in overcoming village food security?

   - Yes 1
   - No 2

(If Yes, ask:) Can you give some examples of these foods, and explain why they are useful to local people?

________________________________________________________________________

2. Do you think there are some specific traditional foods that the villagers offer as supplementary foods to their children, and lactating women?

   - Yes 1
(If Yes, ask:) Can you give some examples of the type of food they offer and why?

<table>
<thead>
<tr>
<th>Types of foods</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 Yr. Children</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| > 5 Yr. Children |      |
|                  |      |
|                  |      |

| Lactating & Pregnant women |      |
|                           |      |
|                           |      |

3. If the village people have a problem of maintaining good health of their lactating women or growing children, who and where do they go to seek for advice in a first place?

4. In general, what do you think of such advice in terms of their effectiveness in solving problems?

5. In what capacity, were you involved in the activities of the National Vitamin A Program/ Nutrition Blindness Prevention Pilot Project/Production Credit for Rural Women?
6. What do you think the project was meant for (the project theme)?

7. Can you explain in brief the activities of this project?

8. Who do you think were the beneficiaries of the project activities and why?

9. Can you briefly explain your role in this project?

(If the respondent does not mention his/her role in project design, development and implementation, ask:)

Did you take part in any process of the project design, development and implementation?

- Yes 1
- No 2

(If Yes, ask:) How and when?

(Go to Question no. 11)

10. Why you did not take part?
11. What were the project approaches to motivate the villagers to involve in its activities?

12. Do you personally think that these approaches were quite stimulating to villagers?
   - Yes 1
   - No 2
   (If Yes, ask:) How do you think so?

13. Among the various communication media used in this project (e.g. one-to-one communication, audio and video, poster/pamphlet and folk song etc.), which media do you think were most influential in stimulating village people's participation in the project, and why?

14. Which do you think is the most important, can you explain in priority order?

<table>
<thead>
<tr>
<th>Medium/media</th>
<th>Priority Order</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
15. Do you think that the information/advice brought to the villagers by the project's medium/media were quite clear to their understanding?

- Yes 1
- No 2

(If Yes, ask: How?)

(Go to Question no. 17)

16. Why do you feel that the information/advice were not clear?

______________________________________________________________

17. What feelings do you have about the project officials who are not recruited directly for the village in carrying out the project activities?

______________________________________________________________

18. Based on your personal involvement, what do you think about the contribution of the project to the village and village people?

______________________________________________________________

19. Based on your observation, do you believe that the villagers have learned something form this project?

- Yes 1
- No 2

(If Yes, ask:) What have they learned, explain?

______________________________________________________________

346
20. What do you think are the best ways of communicating to village people?. Here are some possible ways of communication. Which one/s would you prefer, and why?

(Check the appropriate number that represents your preference as 1 for first preference, 2 for second preference and so on.)

<table>
<thead>
<tr>
<th>Preference</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-to-one discussions</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Group Meetings/Consultations</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Use of audio (e.g. cassette tapes, radios)</td>
<td>1 2 3 4 5 6 7 8</td>
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<tr>
<td>Use of visual aids (e.g. slides, video-tapes, film-projectors etc.)</td>
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<td>Posters/Pamphlets</td>
<td>1 2 3 4 5 6 7 8</td>
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<td>Billboards</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Use of local folk songs</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Use of local folk dance/stage play</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>Others (Specify):</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
</tbody>
</table>
21. What is the usual method of dissemination of information in the village by the government and non-government organisations in regard to food, nutrition and health? Check the Following:

- One-way method: Not involving consultations, meetings, discussions between organisations and villagers in information design and dissemination.

- Two-way method: Involving consultations, meetings, discussions between organisations and villagers in information design and dissemination.

- Other (Specify) ____________________________________________________________________________

22. Do you believe that the villagers should be consulted in the design and dissemination of information/messages?

- Yes 1
- No 2

(If Yes, ask:) Why? __________________________________________________________________________

23. Which one do you think would be most appropriate way of consultation with the villagers?

- Inviting them to a group meeting 1
- Making them members of a consultative committee 2
24. In view of your existing village conditions, what are the best ways of communications to bring about people's participation to food and nutrition program?

25. Which one of the following statement comes closest to your own feeling and beliefs:

- Health and nutrition messages should solely be designed and disseminated by the experts alone as the local people do not have any expertise in this field.

- Local people's opinion and participation should be included in the design and dissemination of messages as I believe that the local people also are the experts of the local conditions and traditional practices.

- Neither of the above.

(If Neither of the above, ask:) why?

26. Based upon your feelings and understanding, what do you think will make a nutrition communication participatory and non-participatory?
27. Do you think that the village people are influenced by the commercial advertisements being aired/televised every day by the commercial companies to promote their products such as beer, cigarette, soft drinks etc.?
   - Yes 1
   - No (Go to Question no 29) 2
   (If Yes, ask:) How and why?

28. Based on your experience and observation, how would you assess the increase in level of consumption of commercial foods by the village people over the past five years? Please check from the following:
   - Less than per cent 1
   - 25 to 50 per cent 2
   - 50 to 75 per cent 3
   - 75 to 100 per cent 4
   - 100 Over 5

29. Which one/s from the following come/s to the closest to your feelings in regard to those village people who frequently go to the city or go for work or study there?
   (SD=Strongly Disagree; D= Disagree; N= Neutral; A= Agree SA= Strongly Agree)
   - They bring new knowledge of commercial
foods to village.

- They persuade village colleagues to cultivate the habit of commercial foods.

- They help reinforce the influence of commercial advertisement by asking their village colleagues to try the commercial foods for establishing prestige and pride.

- They do not at all influence village colleagues to adapt a new food behaviour that they have learnt from the city.

30. Respondent's Personal Characteristics:

Age:

- Under 25: 1
- 25-29: 2
- 30-34: 3
- 35-39: 4
- 40 and Over: 5
Sex:
- Male 1
- Female 2

Caste:
- Brahmin 1
- Chettiry 2
- Baishya 3
- Shuddra 4

Religion:
- Hindu 1
- Buddist 2
- Islam 3
- Christian 4
- Others 5

Present position in the Village:
- Community Worker/Volunteer 1
- Village Committee Chairman 2
- Village Committee Member 3
- School Teacher 4
- Others (Specify) 5

Total no. of Children:
- No. of Male children under 5 or 5
- No. of Female children under 5 or 5
Were you or anybody of your family member pregnant in the last 12 months?
- Yes 1
- No 2

Did you or anybody of your family member breastfeed the baby?
- Yes 1
- No 2

Marital status:
- Single 1
- Married 2
- Separated 3
- Divorced 4
- Widowed 5
- Others (de facto etc.) 6

Education:
- Completed Postgraduate Degree/Diploma 1
- Completed Certificate Level 2
- Completed High school/ Vocational Secondary School 3
- Completed Primary School 4
- Completed Elementary School 5
- Other 6

Language spoken, and literacy level. (RW= can read and write, RNW= can read but not write, NRW= Cannot read and write)
<table>
<thead>
<tr>
<th>Language Spoken</th>
<th>Level of Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nepali</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Newari</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Bhojpuri</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Maithali</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Hindi</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Tharu</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Gurung</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Rai</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Limbu</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Magar</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>English</td>
<td>RW RNW NRW</td>
</tr>
<tr>
<td>Others</td>
<td>RW RNW NRW</td>
</tr>
</tbody>
</table>

House Structure:
- Stone/Brick: 1
- Wooden: 2

Communication equipment at home:
- Radio: 1
- Television: 2
- Telephone: 3
- Others (Specify): 4

Communication equipment at the village:
- Radio: 1
- Television: 2
- Telephone: 3
- Others (Specify): 4
APPENDIX 11

List of government and non-government Organisations involved in survey interviews

Department of Agricultural Development, Ministry of Food, Agriculture & Irrigation (DOAD/ MFAI)

Department of Agriculture, Ministry of Food, Agriculture & Irrigation (DOA/ MFAI)

Department of Health Services, Ministry of Health (DOHS/MOH)

Department of Information, Ministry of Communication (DOI/MOC)

Food & Agriculture Organisation (FAO)

Manari Health Post, Department of Health, Nawalparasi

Ministry of Communications (MOC)

Ministry of Education, Culture and Social Welfare (MECSW)

Ministry of Food, Agriculture & Irrigation (MFAI)

Ministry of Health (MOH)

Ministry of Local Development (MOLD)

Multi-sectoral Training in Nutrition for the Prevention of Vitamin A Deficiency (MTNPVAD)

National Health Education, Information and Communication Centre, Ministry of Health (NHEICC/MOH)

National Planning Commission (NPC)

National Vitamin A Program (NVAP)

Nepal Press Institute (NPI)
Nepal Television (NTV)

Pali Health Post, Department of Health (PHP)

Radio Nepal

United Mission to Nepal (UNM)

United Nations International Children’s Emergency Fund (UNICEF)

Women’s Development Division, Branch Office Rasnalu, Ministry of Local Development, Ramechhap.

World view/Nutritional Blindness Prevention Pilot Project (NBPPP)
### APPENDIX 12

**Interviewees from government and non-government organisations by sex and professional status**

<table>
<thead>
<tr>
<th></th>
<th>Constitutional Level*</th>
<th>Senior Level</th>
<th>Middle Level</th>
<th>Lower Level</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>Male/ Female</td>
<td>Male/ Female</td>
<td>Male/ Female</td>
<td>Male/ Female</td>
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<tr>
<td><strong>Government</strong></td>
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<td>Ministries/ Departments</td>
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<td>6/0</td>
<td>2/1</td>
<td>2/1</td>
<td>14</td>
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<tr>
<td><strong>Semi-Government Organisations</strong></td>
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<td>2/0</td>
<td>0/0</td>
<td>0/0</td>
<td>2</td>
</tr>
<tr>
<td><strong>NGOs and INGOs</strong></td>
<td>0/0</td>
<td>1/1</td>
<td>0/0</td>
<td>0/0</td>
<td>2</td>
</tr>
<tr>
<td><strong>International Organisations</strong></td>
<td>0/0</td>
<td>1/0</td>
<td>1/0</td>
<td>0/0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1/0</td>
<td>10/2</td>
<td>3/1</td>
<td>2/1</td>
<td>20</td>
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</tbody>
</table>

* Constitutional level denotes to constitutional appointment responsible for looking after national level government policy formulation and implementation.

** Semi-Government Organisations are partly government owned organisations.
APPENDIX 13

List of local institutions involved in survey interviews in Nawalparasi, Gorkha and Ramechhap Districts

Hamali Primary School, Pali, Nawalparasi
National Vitamin A Program Female Volunteer, Pali, Nawalparasi
Janta High School, Naya Belhani, Nawalparasi
National Vitamin A Program Female Volunteer, Manari, Nawalparasi
Village Development Committee, Pali, Nawalparasi
Village Development Committee, Manari, Nawalparasi
Village Development Committee, Nayabelhani, Nawalparasi
Mirkot High School, Mirkot, Gorkha
Women Volunteers, Mirkot, Gorkha
Prithibi Primary School, Khoplang, Gorkha
Women Volunteers, Khoplang, Gorkha
Village Development Committee, Mirkot, Gorkha
Village Development Committee, Khoplang, Gorkha
Village Development Committee, Rasnalu, Ramechhap
Women Volunteer, Rasnalu, Ramechhap
## APPENDIX 14

*Interviewees representing local institutions in survey interviews in Nawalparasi, Gorkha and Ramechhap by sex and social/professional status*

<table>
<thead>
<tr>
<th>District</th>
<th>Political Leader</th>
<th>School Teacher</th>
<th>Social Worker/ Volunteer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Nawalparasi</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Gorkha</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Ramechhap</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

359
APPENDIX 15

Survey districts (Map of Nepal)
Villagers taking part in focus group discussions in Nawalparasi, Gorkha and Ramechhap
Appendix 16 Contd.

Ramechhap
APPENDIX 17

A guideline questionnaire for Focus Group Interview in three districts of Nepal

Three Districts: Ramechhap, Gorkha, Nawalparasi

Village: ____________________________
Number of people attended to group interview: ________________

The basic objective of the focus group interview as delineated in the program proposal is to assess the knowledge, attitudes, and beliefs of people regarding participatory and non-participatory communication. Unstructured group interview using some of the Freire's problem-posing approaches will be carried out in a group of 10 people from each 60 selected households of each sample district.

In using some of the Freire's problem-posing approaches, the researcher will act simply as an animator that provides a frame-work for discussions. Participant in the discussion or group interview will be considered as creative, active people that can consider a common problems and find solutions. The researcher will provide a framework for discussions and ask simple questions to stimulate discussions.

To start off with discussions, the researcher will show a poster to the group which contains a photograph of two children: one with blind eyes holding a plate of rice only, and one with normal eyes holding a plate of rice, and vegetables etc.

The discussion questions will be the following:

1. What do you see in this picture?
2. Why one child is blind?
3. Is it a common problem in this district?
4. What are the other problems you find on the children apart from the blindness?
5. Do you think these problems are very common in your districts?
6. What do you think are the main causes for these problems?

After the above questions, the researcher will show to the group the second poster containing a photograph of two women: one with rice only and another with rice and vegetables etc. The woman with rice looks very unhealthy by appearance. The following questions will be put up for discussions.

1. What do you see in the picture?
2. Why the women with only rice looks so unhealthy as compared to next women?
3. Is it a common problem in this district?
4. What are the other health problems do you find on women?
5. Who are the most common victims of these problems?
6. Do you think these problems are very common in your districts?
7. What do you think are the main causes for these problems?

After asking the questions as above, the researcher will show to the group a picture containing various locally available green vegetables, and ask the following questions:

1. What do you see in this picture?
2. Do you use some of these vegetables?
   (If Not, ask:) Why?
3. What is your traditional beliefs in these vegetables?
4. Has any body from your village or from outside ever explained their importance to your health especially to your eyes?
5. Do you think we can maximise their use especially for needy children and women as they are easily available in our villages, and how?
6. What can we do to explain our village people on the importance of these vegetables for our needy children and women and of course, for ourselves?
7. Do you ever have some government and non-government nutrition project designed to promote locally available resources?

8. Do you think such project will help the village people to alleviate food and nutrition problems, and how?

9. Do you think the village people also be involved in such project activities and how?

After asking the above questions, the group will be asked the following questions:

1. What do you think are the most important problems in your district/village in regard to health of children below five years, and pregnant and lactating women?

2. Which one/s do you think are to be addressed urgently?

3. What can be done by the village people to solve this/these problems?

4. Do you need the government’s or any organisations' help to surmount these problems?

5. What are your experiences as of to-day about the help or assistance extended by the government and non-government organisations?

6. What do you think should be the assistance of the government and non-government organisations?

7. Do you like to be involved in the process of help and assistance of the government and non-government or organisations and why?

8. How long do you think the assistance or help of the government and non-government organisations should last?

9. Do you think it is important to work together with the government and non-government organisations to fight the problems of malnutrition and food?

10. What do you think would be the difficulties in working together with the government or non-government organisations?

11. What do you think should be your role in working together with the government and non-government organisations?

After the above questions, the group will be asked to listen to the audio messages or see posters (or do the both depending on the situation) of the project recently completed or currently on-going in their respective district/village, then the following question will be asked:
1. Are you familiar with this poster/audio message?
2. What is/are it/these related to?
3. How do you first know about it/them?
4. Who brought it/them to you?
5. Do you think these messages on the poster and audio are quite relevant to address the urgent nutritional needs of your village?
6. Was any of you invited to put up your own ideas in designing and dissemination of such messages?
7. Do you know anyone from your village who was involved in designing and dissemination of these messages?
8. Assuming that if you were invited to design and implement a nutrition campaign in your village, what would you do in terms of:
   (a) choosing appropriate messages;
   (b) selecting media for dissemination of messages; and
   (c) ascertaining whether your messages are suitable to village people to let them understand the issues and their resolutions.
9. What do you think are the most important weaknesses of the government and non-government nutrition campaigns in addressing the village food and nutrition problems?
10. What is your general attitude and beliefs on government nutrition communication campaigns?
11. What do you think the majority of your village people believe on such communication campaigns?
12. What do you think would be the appropriate ways of informing people (Radio, Video, Television, Poster/Pamphlet, Billboards, Newspaper, one-to-one communications, local media: folk songs, dances, road play) and why?

After the above questions, the participants will finally be asked the following questions in relation to their attitude, values and beliefs on participatory and non-participatory nutrition communications.
1. How do you traditionally resolve the food and nutrition problems of your village?

2. If there are some serious problem in the village, do you normally get together or participate in discussion about the problems and the solutions?

3. During such participation, do you normally invite some people who can give you relevant advice to resolve the problem?

4. If you do invite, who do you normally invite?

5. Do you believe that such participation of people help resolve problems?

6. How do the village people take the values of such gathering to resolve the local problems?

7. If the problems are not resolved by such gatherings, do you go to the government and non-government organisations to help resolve the problem?

8. What do you think of resolving your village problems by the project people without consulting you?

9. Do you believe that the expert who comes to your village to resolve the food and nutrition problems can effectively work without your participation?

10. Based on your experience, how do the village people see to the expert or project staff who come to work in your village with their own pre-designed strategies for solving your village problems?

11. How would you normally respond to such expert or project staff in carrying out their activities?

12. Do you think that the nutrition communication designed for your village should be discussed with you before it is disseminated in the village?

13. What do you think are the advantages and disadvantages of such discussions?

14. Do you think that such discussions evoke your participation in the nutrition communication process; if yes, how?

15. How do you think a nutrition communication can be a participatory and non-participatory, and why?

16. How would you categorise the communication strategies of the project recently completed/on-going in terms of its participatory and non-participatory natures, and why?
Do not forget to give your child the “Vitamin A Capsule” which is invariably very essential to the health of your child.

Vitamin ‘A’ Capsule:

Where is it distributed? In your own ward.

Who distributes? Women’s Volunteer of your own ward.

Whom it is distributed to? To all children below 6 months to 5 years.

When is it distributed? In this Kartik 2 & 3.

In order to keep your child healthy give them daily green leafy vegetables and yellow fruits even after the child is given the capsule.

For further information, contact the nearest health post or village health workers.

National Vitamin ‘A’ Program

Note: The above message is a translated version of Nepalese language.
APPENDIX 19

Frequency of green leafy vegetables intake by level of knowledge, participation, education and communication exposed to, in Nawalparasi (male respondents)

<table>
<thead>
<tr>
<th>Frequency of green leafy vegetable intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of participation Frequency (%)</th>
<th>Level of education Frequency (%)</th>
<th>Level of communication exposed to Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Satisfactory</td>
<td>Poor</td>
<td>None</td>
</tr>
<tr>
<td>Daily</td>
<td>20 (29.9)</td>
<td>9 (13.4)</td>
<td>0</td>
<td>2 (3.0)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>16 (23.9)</td>
<td>9 (13.4)</td>
<td>2 (3.0)</td>
<td>6 (9.0)</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>2 (3.0)</td>
<td>0</td>
<td>1 (1.5)</td>
<td>0</td>
</tr>
<tr>
<td>n</td>
<td>67</td>
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</tr>
<tr>
<td>Correlation</td>
<td>.17</td>
<td>-</td>
<td>.07</td>
<td>-</td>
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</tbody>
</table>

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## APPENDIX 20

*Frequency of green leafy vegetables intake by level of knowledge, participation, education and communication exposed to, in Navalparasi (female respondents)*

<table>
<thead>
<tr>
<th>Frequency of green leafy vegetable intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of participation Frequency (%)</th>
<th>Level of education Frequency (%)</th>
<th>Level of communication exposed to Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Partial</td>
<td>Level of</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Satisfactory</td>
<td>None</td>
<td>school/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td></td>
<td>secondary</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td></td>
<td>Primary/</td>
<td>University</td>
</tr>
<tr>
<td>Daily</td>
<td>19 (28.4)</td>
<td>0</td>
<td>31 (46.3)</td>
<td>5 (7.5)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>18 (26.9)</td>
<td>1</td>
<td>32 (47.8)</td>
<td>0</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>0</td>
<td>1</td>
<td>3 (4.5)</td>
<td>0</td>
</tr>
<tr>
<td>n</td>
<td>67</td>
<td>67</td>
<td>67</td>
<td>67</td>
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</tbody>
</table>

**Correlation**

- Rho (ρ) = .11
- Gamma (γ) = .82

- Rho (ρ) = .23
- Gamma (γ) = .64
APPENDIX 21

Frequency of yellow fruit intake by level of knowledge, participation, education and communication exposed to, in (female respondents)

<table>
<thead>
<tr>
<th>Frequency of yellow fruit intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of participation Frequency (%)</th>
<th>Level of education Frequency (%)</th>
<th>Level of communication exposed to Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Satisfactory</td>
<td>Poor</td>
<td>None</td>
</tr>
<tr>
<td>Daily</td>
<td>0 (13.4)</td>
<td>3 (4.5)</td>
<td>2 (3.0)</td>
<td>2 (3.0)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>9 (13.4)</td>
<td>6 (9.0)</td>
<td>11 (16.4)</td>
<td>5 (7.5)</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>7 (10.4)</td>
<td>9 (13.4)</td>
<td>7 (10.4)</td>
<td>6 (9.0)</td>
</tr>
</tbody>
</table>

Correlation:
- Rho (ρ): -0.07
- Gamma (γ): 0.61
- Spearman's Rho: -0.08
APPENDIS 22
Posters intended for use in villages by NVAP field-workers
APPENDIX 23
Examples of posters and flip charts used in Gorkha by NBPPP
APPENDIX 24

Frequency of green leafy vegetables intake by level of knowledge, participation, education and Communication exposed to, in Gorkha (male respondents)

<table>
<thead>
<tr>
<th>Frequency of green leafy vegetable intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of participation Frequency (%)</th>
<th>Level of education Frequency (%)</th>
<th>Level of communication exposed to Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>Good</td>
<td>Satisfactory</td>
<td>Poor</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Partial</td>
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<td>University</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High School/ Secondary</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Primary/ Elementary</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Daily</td>
<td>38 (56.7)</td>
<td>12 (17.9)</td>
<td>3 (4.5)</td>
<td>1 (1.5)</td>
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<tr>
<td></td>
<td>36 (53.7)</td>
<td>18 (26.9)</td>
<td>3 (4.5)</td>
<td>6 (9.0)</td>
</tr>
<tr>
<td></td>
<td>22 (32.8)</td>
<td>23 (34.3)</td>
<td>28 (41.8)</td>
<td>7 (10.4)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>9 (13.4)</td>
<td>3 (4.5)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>8 (11.9)</td>
<td>5 (7.5)</td>
<td>1 (1.5)</td>
<td>6 (9.0)</td>
</tr>
<tr>
<td></td>
<td>6 (9.0)</td>
<td>7 (10.4)</td>
<td>0</td>
<td>1 (1.5)</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
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<tr>
<td>m</td>
<td>67</td>
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</tbody>
</table>

Correlation

- Rho (p)
- Gamma (γ)

- .03
- .11
- .14
- .06

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**APPENDIX 25**

*Frequency of green leafy vegetables by level of knowledge, participation, education and communication exposed to, in Gorkha (female respondents)*

<table>
<thead>
<tr>
<th>Frequency of green leafy vegetables intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of participation Frequency (%)</th>
<th>Level of education Frequency (%)</th>
<th>Level of communication exposed to Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Satisfactory</td>
<td>Poor</td>
<td>None</td>
</tr>
<tr>
<td>Daily</td>
<td>33 (49.3)</td>
<td>2 (3.0)</td>
<td>15 (22.4)</td>
<td>4 (6.0)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>10 (14.9)</td>
<td>1 (1.5)</td>
<td>1 (1.5)</td>
<td>1 (1.5)</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

| n | 67 | 67 | 67 | 67 |

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Rho (ρ)</th>
<th>Gamma (γ)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.33</td>
<td>.44</td>
</tr>
</tbody>
</table>

-.10 .10
**APPENDIX 26**

*Frequency of yellow fruit intake by level of knowledge, participation, education and communication exposed to, in Gorkha (male respondents)*

<table>
<thead>
<tr>
<th>Frequency of yellow fruit intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of participation Frequency (%)</th>
<th>Level of education Frequency (%)</th>
<th>Level of communication exposed to Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Satisfactory</td>
<td>Poor</td>
<td>None</td>
</tr>
<tr>
<td>Daily</td>
<td>8 (11.9)</td>
<td>6 (9.0)</td>
<td>1 (1.5)</td>
<td>2 (3.0)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>12 (17.9)</td>
<td>10 (14.9)</td>
<td>2 (3.0)</td>
<td>4 (6.0)</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>7 (10.4)</td>
<td>5 (7.5)</td>
<td>4 (6.0)</td>
<td>6 (9.0)</td>
</tr>
</tbody>
</table>

**n**

- 67
- 67
- 67

**Correlation**

- Rho (ρ) 0.20
- Gamma (γ) 0.31

- 18
- .12

-
**APPENDIX 27**

*Frequency of yellow fruit intake by level of knowledge, participation, education and communication exposed to, in Gorkha (female respondents)*

<table>
<thead>
<tr>
<th>Frequency of yellow fruit intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of participation Frequency (%)</th>
<th>Level of education Frequency (%)</th>
<th>Level of communication exposed to Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Satisfactory</td>
<td>Poor</td>
<td>None</td>
</tr>
<tr>
<td>Daily</td>
<td>9 (13.4)</td>
<td>2 (3.0)</td>
<td>4 (6.0)</td>
<td>2 (3.0)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>15 (22.4)</td>
<td>0</td>
<td>11 (16.4)</td>
<td>2 (3.0)</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>7 (10.4)</td>
<td>2 (3.0)</td>
<td>9 (13.4)</td>
<td>4 (6.0)</td>
</tr>
<tr>
<td>n</td>
<td>67</td>
<td>67</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>Correlation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rho (p)</td>
<td>.18</td>
<td>-</td>
<td>.20</td>
<td>-</td>
</tr>
<tr>
<td>Gamma (γ)</td>
<td>-</td>
<td>23</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## APPENDIX 28

**Level of knowledge (yellow fruits) by level of participation, education and communication exposed to, in Ramechhap**

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Level of participation</th>
<th>Frequency (%)</th>
<th>Level of education</th>
<th>Frequency (%)</th>
<th>Level of communication exposed to</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Partial</td>
<td></td>
<td>University</td>
<td>High School/ Secondary</td>
<td>Primary/ Elementary</td>
<td>None</td>
</tr>
<tr>
<td>Good</td>
<td>7 (5.2)</td>
<td>14 (10.5)</td>
<td>0</td>
<td>1 (0.7)</td>
<td>8 (6.0)</td>
<td>12 (9.0)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>6 (4.5)</td>
<td>20 (14.9)</td>
<td>1 (0.7)</td>
<td>0</td>
<td>11 (8.2)</td>
<td>14 (10.5)</td>
</tr>
<tr>
<td>Poor</td>
<td>21 (15.7)</td>
<td>21 (15.7)</td>
<td>0</td>
<td>1 (0.7)</td>
<td>3 (2.2)</td>
<td>37 (27.6)</td>
</tr>
<tr>
<td>None</td>
<td>18 (13.4)</td>
<td>27 (20.1)</td>
<td>0</td>
<td>2 (1.5)</td>
<td>9 (6.7)</td>
<td>35 (26.1)</td>
</tr>
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</table>

**Statistical test:**

**Correlation**

<table>
<thead>
<tr>
<th>n</th>
<th>134</th>
<th>134</th>
<th>134</th>
</tr>
</thead>
<tbody>
<tr>
<td>ρ</td>
<td>-</td>
<td>0.18</td>
<td>-0.12</td>
</tr>
<tr>
<td>γ</td>
<td>-0.13</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## APPENDIX 29

*Level of knowledge (green leafy vegetables) by level of participation, education and communication exposed to, in Ramechhap (female respondents)*

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Level of participation</th>
<th>Level of education</th>
<th>Level of communication exposed to</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency (%)</td>
<td>Frequency (%)</td>
<td>Frequency (%)</td>
</tr>
<tr>
<td></td>
<td>Partial</td>
<td>None</td>
<td>High</td>
</tr>
<tr>
<td>Good</td>
<td>32 (47.8)</td>
<td>9 (13.4)</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2 (3.0)</td>
<td>39 (58.2)</td>
<td>0</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>2 (3.0)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1 (1.5)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1 (1.5)</td>
<td>0</td>
</tr>
<tr>
<td>Poor</td>
<td>13 (19.4)</td>
<td>6 (9.0)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>19 (28.4)</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>None</td>
<td>5 (7.5)</td>
<td>0</td>
<td>5 (7.5)</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Statistical test:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>67</td>
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<tr>
<td>ρ</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>γ</td>
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<td>30</td>
<td>-</td>
</tr>
</tbody>
</table>

*Statistical test:*

- Correlation
  - n: 67
  - ρ: -
  - γ: .01
### APPENDIX 30

**Level of knowledge (yellow fruits) by level of participation, education and communication exposed to, in Ramechhap (female respondents)**

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Level of participation Frequency (%)</th>
<th>Level of education Frequency (%)</th>
<th>Level of communication exposed to Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Partial</td>
<td>None</td>
<td>University</td>
</tr>
<tr>
<td>Good</td>
<td>6 (9.0)</td>
<td>1 (1.5)</td>
<td>0</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>6 (9.0)</td>
<td>3 (4.5)</td>
<td>0</td>
</tr>
<tr>
<td>Poor</td>
<td>21 (31.3)</td>
<td>7 (10.4)</td>
<td>0</td>
</tr>
<tr>
<td>None</td>
<td>19 (28.4)</td>
<td>4 (6.0)</td>
<td>0</td>
</tr>
</tbody>
</table>

**Statistical test:**

<table>
<thead>
<tr>
<th>Correlation</th>
<th>n</th>
<th>ρ</th>
<th>γ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.02</td>
<td>.38</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statistic test:</th>
<th>n</th>
<th>ρ</th>
<th>γ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.02</td>
<td>.38</td>
<td></td>
</tr>
</tbody>
</table>
# APPENDIX 31

*Frequency of green leafy vegetables by level of knowledge, participation, education and communication exposed to, in Ramechhap (female respondents)*

<table>
<thead>
<tr>
<th>Frequency of green leafy vegetables intake</th>
<th>Level of knowledge (Frequency %)</th>
<th>Level of participation (Frequency %)</th>
<th>Level of education (Frequency %)</th>
<th>Level of communication exposed to (Frequency %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>Good</td>
<td>Satisfactory</td>
<td>Poor</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>23 (34.3)</td>
<td>1 (1.5)</td>
<td>15 (22.4)</td>
<td>3 (4.5)</td>
</tr>
<tr>
<td>More than once a week</td>
<td>18 (26.9)</td>
<td>1 (1.5)</td>
<td>4 (6.0)</td>
<td>2 (3.0)</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>n</td>
<td>67</td>
<td>67</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>Correlation</td>
<td>.31</td>
<td>.11</td>
<td>.56</td>
<td>.20</td>
</tr>
<tr>
<td>Rho (p)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gamma (γ)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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# APPENDIX 32

Frequency of green leafy vegetable intake by level of knowledge and education in Ramechhap (male respondents)

<table>
<thead>
<tr>
<th>Frequency of green leafy vegetable intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of education Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good (40.3)</td>
<td>Satisfactory (4.5)</td>
</tr>
<tr>
<td>Daily</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>More than once a week</td>
<td>16 (23.9)</td>
<td>3 (4.5)</td>
</tr>
<tr>
<td>Weekly or less</td>
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<td>0</td>
</tr>
<tr>
<td>n</td>
<td>67</td>
<td></td>
</tr>
</tbody>
</table>

Correlation:

- **Rho (p)**
- **Gamma (γ)**

- **Correlation**
- **Rho (p)**
- **Gamma (γ)**

<table>
<thead>
<tr>
<th>n</th>
<th>67</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rho (p)</th>
<th>Gamma (γ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.00</td>
<td>.23</td>
</tr>
</tbody>
</table>
## APPENDIX 33

**Frequency of yellow fruits intake by level of knowledge and education in Ramechhap (male respondents)**

<table>
<thead>
<tr>
<th>Frequency of yellow fruits intake</th>
<th>Level of knowledge Frequency (%)</th>
<th>Level of education Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Daily</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>More than once a week</td>
<td>1 (1.5)</td>
<td>4 (6.0)</td>
</tr>
<tr>
<td>Weekly or less</td>
<td>13 (19.4)</td>
<td>13 (19.4)</td>
</tr>
<tr>
<td>n</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
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<td>.03</td>
</tr>
<tr>
<td>Rho (p)</td>
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<td></td>
</tr>
<tr>
<td>Gamma (γ)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 34
Examples of cultural invasion: commercial foods and drinks (coca cola and corn ball) being transported to a remote part of Gorkha district
APPENDIX 35
A TV disc antenna in a remote village of Gorkha