

AGRICULTURE AND FOOD SECURITY PROJECT



Social and Behaviour Change Communication Strategy

to improve food and nutrition security



DRAFT



Nutrition Section
Child Health Division
Department of Health Services
Ministry of Health and Population

Agriculture and Food Security Project

Social and Behaviour Change Communication Strategy

to improve Food and Nutrition Security



**Nutrition Section
Child Health Division**



Department of Health Services
Ministry of Health and Population



Food and Agriculture Organization
of the United Nations



Department of Food Technology and Quality Control
Ministry of Agricultural Development

Table of Contents

BACKGROUND	3
AGRICULTURE AND FOOD SECURITY PROJECT OVERVIEW	3
FOOD AND NUTRITIONAL STATUS ENHANCEMENT.....	4
INTER LINKAGE BETWEEN COMPONENTS-CROP, LIVESTOCK AND NUTRITION	5
SITUATION ANALYSIS	6
AFSP BASELINE FINDING.....	6
REVIEW OF EXISTING BCC WORK.....	8
RATIONALE FOR BCC.....	8
SOCIAL AND BEHAVIOUR CHANGE COMMUNICATION STRATEGY.....	9
PROJECT OBJECTIVE.....	9
GOAL OF THE STRATEGY.....	9
KEY PRINCIPLE FOR THE STRATEGY	10
OVERALL FRAMEWORK FOR COMMUNICATION STRATEGY.....	10
STRATEGIC AUDIENCES.....	14
AREAS TO FOCUS	14
COMMUNICATION INTERVENTIONS/STRATEGY	15
TECHNICAL CONTENT AND MATERIAL DEVELOPMENT	16
KEY ACTIVITIES FOR BCC.....	18
BEHAVIOUR CHANGE COMMUNICATION IMPLEMENTATION MECHANISM.....	21
TRAINING AND CAPACITY BUILDING:	22
JOB RESPONSIBILITIES FOR BCC	22
MONITORING AND EVALUATION	25

Background

Food and nutrition security are a huge challenge in Nepal, where agricultural productivity is far below potential yields. Due to low usage of improved seeds, chemical inputs, and irrigation, Nepal's agricultural productivity is among the lowest in South Asia.¹ According to the Nepal Thematic Report on Food Security and Nutrition 2013, one in five households in Nepal had an inadequate diet based on the Food Consumption score, and one in four households were considered food poor.² Consequently, Nepal has a very high rate of child under-nutrition, with 41 per cent of children under five stunted, 11 per cent wasted and 28 per cent underweight.³ About 20 percent women are chronically undernourished while 14 percent have over nutrition. Prevalence of both underweight and overweight among women is indicative of a potential double burden of malnutrition in the country. Poor nutrition during pregnancy and childhood leads to life-long physical and cognitive delays, limiting performance in school, physical work capacity, and participation in civil society and the economy, ultimately hindering the alleviation of poverty. The slow progress towards combatting malnutrition has created demand for fresh, innovative approaches and cross-sectoral efforts.

Recognizing the importance of women and children's health in long-term poverty reduction, the Government of Nepal has put food and nutrition security on the national development agenda. In recent years, there has been increasing interest and commitment from the government to implement nutrition sensitive as well as specific interventions involving key sectors such as health, agriculture and education. Government of Nepal has given high priority to agricultural productivity and improving the food security of the population. Contribution from agricultural sector for improved nutrition outcomes has been the major focus in recent times as highlighted in the Framework for Action of the 2nd International Conference on Nutrition (ICN2). This realization about the importance of agri-based and food based nutrition is reflected in recent health and agriculture policy documents of Nepal. High-level commitment in the form of the Multi-Sector Nutrition Plan (MSNP) and Agriculture Development Strategy⁴ has focused on multi-sectoral efforts to address the problem of food insecurity and malnutrition. The recently approved National Health Policy has also emphasized the importance of food-based approach for improving the nutritional status of the population.

Agriculture and Food Security Project overview

The Government of Nepal (GoN) is making a concerted effort to improve food security and sustain economic growth. Building on a Country Investment Plan developed by the GoN in consultation with donors, civil society organizations and other stakeholders; GoN was awarded a competitive grant by the Global Agriculture and Food Security Program (GAFSP) to implement the Agriculture and Food Security Project (AFSP). AFSP is a unique multi-sectoral approach, implemented jointly by the Ministry of Agricultural Development and the

¹ Nepal Thematic Report on Food Security and Nutrition 2013, Nepal Planning Commission Central Bureau of Statistics, <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp256518.pdf>

² Nepal Thematic Report on Food Security and Nutrition 2013, Nepal Planning Commission Central Bureau of Statistics, <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp256518.pdf>

³ Nepal Demographic and Health Survey; 2011

⁴ This is the strategic policy document drafted by the Ministry of Agricultural Development, which is in the process of endorsement by the Government of Nepal. Improving nutrition is one of the objective of the document.

Ministry of Health and Population. AFSP is designed to enhance the food and nutritional security of targeted communities. Through a comprehensive set of interventions, the project aims to improve the livelihoods of crop and livestock farmers, women engaged in household/kitchen-garden production, and households with pregnant and nursing women. The project consists of four complementary components: (1) Technology Development and Adaptation; (2) Technology Dissemination and Adoption; (3) Food and Nutrition Status Enhancement; (4) Project Management.

Food and nutritional status enhancement

The Food and Nutrition Status Enhancement (FNSE) component addresses supply-side constraints to nutrition by promoting livestock rearing and kitchen gardens. This will help in improving the local availability of nutritious foods and also improve the access through increased production and indirectly through the improved income. The component also works to improve demand-side aspect for nutritious food, improved nutrition practices, enhanced capacity of farmers, mothers and care-takers through nutrition education, promotion and behavior change communication. The main goal of this component is to contribute to enhancing food and nutrition security in project areas through increased food availability for targeted households and promotion of diversified diets and improved feeding and caring practices for pregnant and nursing women, and children between 6-24 months of age. The increased food availability at the households will be ensured through improved agricultural input and practices. The nutrition promotion and social and behavior change communication will complement the agriculture interventions for promotion of diversified diets and improved feeding and caring practices for maternal, infant and young child nutrition.

There are three major sub-components;

- (i) Enhancing food availability for targeted households and alleviating seasonal food shortages through; promoting community grain banks; home-level food preparation, preservation and processing of locally available high nutritive-value foods
- (ii) Improving feeding and caring practices by; promoting Behavior Change Communications (BCC) and homestead food production (kitchen garden and backyard poultry) groups amongst households with pregnant or nursing mothers and children under two; providing nutrition education to farmers groups (mostly female farmers); promoting simple household labor-saving and drudgery-reducing technologies for women to liberate time for self and child care**
- (iii) Institutional strengthening and capacity building by; training of agriculture and livestock department staff for pro-nutrition actions; strengthening capacity of the Department of Food Technology and Quality Control (DFTQC) to promote safe and nutritious foods in the project area.

Through inputs from the studies conducted by the DFTQC about the nutritive value of locally available foods, improving food preparation practices, food hygiene and safety, the women, care takers, crops and livestock farmers and other relevant beneficiaries will be provided with behavior change communication interventions. These interventions will primarily be implemented through the health and agriculture networks in the districts

primarily through the Health Mothers' Groups and Farmers' group, which already exist in the community. The project is being implemented in 19 districts⁵ of the Mid-Western and Far-Western development region of Nepal and is expected to reach about 162,000 beneficiaries in three agro-climatic zones: hills, low mountains, and high mountains.

Inter linkage between components-crop, livestock and nutrition

There is increasing agreement among development practitioners that food availability alone is insufficient to eliminate malnutrition.⁶ Agriculture and nutrition policies, though often set by different government bodies, directly influence one another. For instance, by influencing the amount and quality of food produced, agriculture policies have an impact on health and nutrition. At the same time, the health status of a population can affect whether people are able to work on a farm, affecting agricultural production.⁷ Despite this clear inter-linkage between agriculture and nutrition, only fairly recently has a concerted global effort to promote cross-sectoral collaboration in this arena begun. Interventions to improve agricultural productivity need to become more nutrition sensitive, and incorporate explicit consumption goals and measurement of nutrition outcomes. Pathways linking agriculture to nutrition are well articulated, but the evidence on the impact of agricultural interventions on nutrition outcomes is limited, mainly due to studies being insufficiently designed to measure the link.⁸ One study found that agricultural interventions had little impact on nutrition unless those projects made complementary human capital investments in nutrition education and gender issues.⁹ However, nutrition education and promotion has also had mixed results on nutrition outcome. A Lancet meta-analysis showed positive effects of education on breastfeeding, but no evidence of this leading to healthier infant growth.¹⁰ Education on complementary feeding strategies reduces stunting, but only when applied in food-secure environments or when combined with food or cash supplements. The AFSP project will make an important contribution in measuring the separate effects of nutrition-sensitive agricultural interventions and nutrition education on nutritional practices.

This BCC strategy will take into account the complimentary aspect of the project interventions. More specifically, **the BCC strategy aims to directly link the BCC materials with locally available foods being promoted by the crop and livestock productivity enhancement aspects of AFSP, as well as other interventions such as the kitchen garden, backyard poultry, food safety and home food processing.**

⁵ Darchula, Baitadi, Dadeldhuda, Humla, Jumla, Mugu, Dolpa, Kalikot, Bajhang, Bajura, Jajarkot, Achham, Doti, Dailekh, Surkhet, Rukum, Salyan, Rolpa, and Piuthan

⁶ See Anna Herforth, Andrew Jones and Per Pinstrup-Andersen Prioritizing nutrition in agriculture and rural development projects: Guiding principles for operational investments
http://dyson.cornell.edu/faculty_sites/pinstrup/pdfs/wbdec2010.pdf

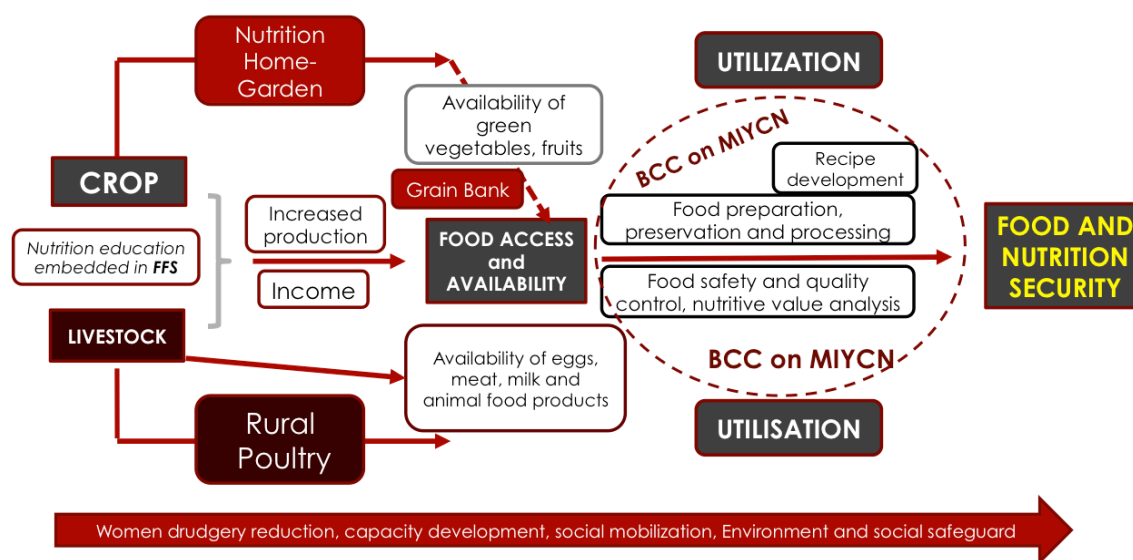
⁷ See for example Food and Agricultural Organization of the United Nations.

http://www.fao.org/ag/agn/nutrition/docs/FAO_Approach_to%20Nutrition_sensitive_agricultural_development.pdf

⁸ Masset, E. et al. (2012). Effectiveness of agricultural interventions that aim to improve nutritional status of children: a systematic review. *BMJ*.

⁹ Peter R Berti, Julia Krasevec and Sian FitzGerald (2004). A review of the effectiveness of agriculture interventions in improving nutrition outcomes. *Public Health Nutrition*, 7, pp 599-609. doi: 10.1079/PHN2003595

¹⁰ Bhutta, Zulfiqar A., et al. "What works? Interventions for maternal and child undernutrition and survival." *The Lancet* 371.9610 (2008): 417-440.



Situation analysis

Despite improvement over the years, under-nutrition remains a serious problem in Nepal. Comparing district level data for our 19 project areas from the Nepal Demographic and Health Survey (NDHS) 2011 shows that child nutrition indicators in project areas lag behind country averages.¹¹ Overall, 41% of children in Nepal are stunted, and the situation in the mid- and far western regions is worse, with 55% of children stunted. A further 11% of children in the country are wasted. Among women of reproductive age, 18% overall are thin, with 24% and 14% thin in the Midwest and Far West, respectively. In terms of micronutrients, 47% of children 6-23 months consumed foods rich in vitamin A in the 24-hour period prior to the survey (40.1% in the Midwest and 47.4% in Far West). Anemia is prevalent in both women and children, with 49.4% of children in Far West and 47.8% in Midwest being anemic. For women, 36% have anemia. Most households in Nepal (80%) used iodized salt, with much lower figures in our project areas (67% Midwest; 56.8 Far West).

AFSP baseline finding

The baseline survey of 2280 households was conducted from July to October of 2013, and includes information about the following:

- Crop choice, production, yields, and revenue
- Livestock ownership, production, yields, and revenue
- Food expenditures
- Household Hunger Scale
- Women's Dietary Diversity Score
- IYCF Practices

11 Ministry of health and Population [Nepal], New ERA, and ICF International Inc. 2012. Nepal Demographic and Health Survey 2011. Kathmandu, Nepal: Ministry of Health and Population, New ERA and ICF International, Calverton, Maryland.

- Nutrition outcomes

as well as basic information including household composition, education level and caste. Since the goal of BCC in this project is to improve dietary practices including care and feeding practices of pregnant and lactating women and children under 2, the findings reviewed here are specific to nutrition and hygiene indicators that are pertinent for the BCC efforts. A more detailed overview of findings is available in the baseline report.

Overall, about half of the sample was categorized as food secure as measured by the Household Food Insecurity Access Scale. The most commonly grown crops in project areas are paddy, potato, wheat, and maize. More than 80% of project households have a kitchen garden, and the most common crops grown were chili, leafy greens, squash and beans. Most of (80%) of the project sample consists of male-headed households.

Women's Dietary Diversity Score revealed 40% of women had low dietary diversity, consuming less than 3 food groups in the past 24 hours. Most of these women consume only staples and legumes, with little animal protein or vitamin-rich vegetables. Only 56.5 percent of pregnant or nursing women consumed any animal protein and micronutrient rich vegetables or fruits, with women in hills having higher consumption of these than those in the mountains. Most pregnant and nursing women consumed vitamin A containing food in the previous day, but few consumed foods rich in iron (with only 5% of women in mountain regions doing so). Women in the lowest quartile of agricultural production have the lowest consumption of Vitamin A rich foods. Approximately three quarters of pregnant women or mothers of children under-two in the project sample reported taking iron-folic acid or deworming pills. This figure is higher for households in which the household head completed primary education.

Only 47% of children in the sample had adequate dietary diversity as per international standards. Mothers did not often mention micronutrient-rich foods such as vegetables and meat when asked what should be fed to children above 6 months along with breast milk, though many mentioned porridge and dairy. Thus, there is a need for improved knowledge regarding appropriate complementary feeding.

Knowledge of best practices for child feeding was high regarding exclusive breastfeeding for the first 6 months of life, as well as the importance of giving colostrum. Yet, fewer than 50% of children aged 6-23 months met the standard minimum 3 IYCF practices for adequate nutrition. Breastfeeding is common, but many introduce complementary foods before 6 months of age and only half of the sample started to breastfeed within one hour of birth. Thus, although knowledge regarding infant feeding is present, it is not translated into behavior change.

In terms of hygiene, 21% of households reported using open defecation. Most women knew the importance of washing hands after using the latrine (86%), but few women thought it important to wash hands before feeding children (17%). Only 4% of children received Orestal, indicating that perhaps education related to rehydration as a means of intervening in the vicious cycle of malnutrition and diarrheal disease is necessary.

Review of existing BCC work

There are a number of ongoing nutrition-focused initiatives in Nepal that include BCC as a part of their interventions. Thus, so as to not reinvent the wheel, this strategy will borrow heavily from the existing BCC materials of ongoing government as well as non-governmental programmes and projects where they are deemed relevant to the local communities in the AFSP project districts. Gaps- especially those that exist with connecting the agricultural productivity to consumption of a diet with improved dietary diversity-will be filled by our own rapid assessments and baseline data for the project.

Ministry of Health and Population has been scaling up of Infant and Young Child Feeding programme throughout the country. The major interventions under this programme include BCC interventions related to breastfeeding, complementary feeding, personal hygiene and sanitation. Suaahara is an integrated project with greater focus on BCC approaches to behavior change using multiple channel of communication to reach to the beneficiaries with messages related to essential nutrition actions and essential hygiene actions to influence the knowledge, perceptions and practices for improved maternal, infant and young child feeding practices. The project has developed range of BCC messages and materials useful at all levels, which have been effective for nutrition education and counseling to mothers and care takers. Similarly, a comprehensive assessment of existing practices related to feeding and caring practices done as part of SAFANSI work by the World Bank in AFSP and Sunaula Hazar Din specific project areas has identified priority areas for BCC interventions in maternal, infant and young child nutrition and recommended key strategies for BCC delivery.

In line with existing plan and policies related to health, nutrition and communication, this strategy will align its strategic approaches with a strong focus on the food-based approaches for addressing the problem of food and nutrition security in the project specific areas. While the focus would be to link the different components of the AFSP for the promotion and consumption of diversified diet using locally available and underutilized foods, the strategy will promote the maternal, infant and young child nutrition activities using the agriculture and health structure to reach to households and community. The strategic approaches are in line with current policy context for food and nutrition and have been built in line with the Multi-Sector Nutrition Plan, National Strategy for Maternal and Child Health and National Communication Framework for Maternal, Infant and Young Child Nutrition.

Rationale for BCC

In order to improve nutrition, quality and quantity of food produced via crops and livestock is only part of the equation. There must also be increased consumption of a variety of foods that meet the nutritional needs of various segments of the population. Care practices including hygiene and psychosocial support of children that impact nutrition must also be improved to ensure maintenance of overall health and nutrition status. Nutrition behaviors, within the larger category of health behaviors, do not occur in a vacuum. Rather, individual characteristics, interpersonal dynamics, community factors and the policy environment in which people reside influence them. There is some evidence that BCC can indeed improve

health and nutrition-related behaviors, although how much and what kind are not well documented.¹²

Social and Behaviour Change Communication Strategy

Building on the existing plan and policies related to communication for health and nutrition and activities pertaining to food and nutritional status enhancement component of Agriculture and Food Security Project, the Social and Behaviour Change Communication Strategy will draw on these existing information and experiences including the findings of the project specific rapid assessments and baseline survey and is aligned with the current policy landscape for food and nutrition in the country.

Project Objective

The Project Development Objective (PDO) is to enhance food and nutritional security of targeted communities in selected locations of Nepal. Food security will be realized through increased food availability, made possible by increasing productivity of agriculture, both crop and livestock. Nutrition security will be realized through improved dietary intake, made possible by promotion of diversified diets, and improved feeding and caring practices for pregnant and nursing women and children up to 2 years of age.

Goal of the strategy

This strategy will contribute to enhancing food and nutrition security in project areas through promotion for consumption of diversified diets and improved feeding and caring practices, including food preparation and food hygiene and safety for targeted households, pregnant and nursing women, and children between 6-24 months of age

Specific objectives

- Advocate at national, district and community level for improved nutrition through agriculture and food security
- Increase knowledge and awareness on nutritional importance of locally available foods for healthy and diversified diet at the household level
- Promote appropriate MIYCN related feeding and care practices among pregnant, lactating and children
- Support locally feasible food preparation, processing and preservation practices including food handling, cleanliness and hygiene
- Contribute in overcoming the identified barriers including the social norms and taboos and promote positive behaviors for nutrition by creating an enabling environment for mothers and caretakers
- Promote to seek health and nutrition related services among the target population

¹² Synder, L.B. (2007). Health communication campaigns and their impact on behavior. *Journal of Nutrition Education and Behavior*, 39:S32-S40.

Key Principle for the Strategy

Operational principles

- **Focus on agriculture/food-based nutrition:** Improving the food and nutrition security by making available nutritious foods through improved agricultural practices and reinforcing them with BCC messages for improved consumption of diversified diet
- **Diet diversification:** The major crux of the strategy will be to improve dietary intake of the pregnant, lactating and children 6-23 months of age through diversified diet using locally available foods and improved feeding and caring practices
- **Consistency of messages:** The BCC messages delivered through all channels will be consistent and coherent with ongoing governmental health communication efforts and other nutrition related activities in the districts
- **Leveraging key contact points:** The same messages will be delivered by leveraging all key contact points (across all delivery channels as well as with the other ongoing nutrition related activities in the selected districts)
- **Ensuring availability of communication materials:** Effective interventions related to behavior change communication largely depend on the availability of communication materials to the frontline workers from both sectors. A bag with all relevant resources will be made available to FCHVs, project facilitators and agriculture technicians.
- **Prioritization:** Priority will be given to thousand-days mothers especially for disadvantaged groups and women involved in crop and livestock activities.
- **Women empowerment:** Involvement of women in farming, building their capacity for improved practices for kitchen gardening and rural poultry, enhancing their role in decision making at household and community level and increasing their knowledge and skill base for nutrition related practices has been kept as the crucial principle to deliver the BCC services.
- **Multi-sector involvement:** Key concerned stakeholders will be involved at all level for better coordination and effective delivery of BCC messages.

Overall Framework for Communication Strategy

Nutrition education¹³ is any combination of educational strategies, accompanied by environmental supports, designed to facilitate voluntary adoption of food choices and other food- and nutrition-related behaviors conducive to health and well being. Behavior Change Communication is a systematic process for the strategic use of communication to promote positive health outcomes, based on proven theories and models of behavior change¹⁴. It implies the use of tailored messages and approaches using a variety of communication channels to develop positive behaviors; to promote and sustain individual, community, and societal behavior change; and to maintain appropriate behaviors.

¹³ McNulty J. 2013. Challenges and issues in nutrition education. Rome: Nutrition Education and Consumer Awareness Group, *Food and Agriculture Organization of the United Nations*. Available at: www.fao.org/ag/humannutrition/nutritioneducation/en/

¹⁴ Ibid

BCC has been used extensively in the public health field, and different strategies draw on differing theories of behavior change, depending on the specific goals of an intervention as well as the target audience. More specifically, a nutrition behavior change strategy “provides individuals with the necessary resources, knowledge, skills, motivation and reinforcement needed to encourage positive change in health behavior.”¹⁵ Here, Nutrition Education, Promotion and BCC are being used to promote nutrition as part of a larger agriculture and food security project. The strategy will help the audiences overcome specific barriers and create enabling environment in a way that the beneficiaries are motivated and influenced for behavior change so that they can practice the new healthy behaviours.

Importance of agriculture-nutrition nexus for improved dietary practices is the key for deciding on the framework and approach for BCC for this strategy. The strategy is grounded on the concept that increased food availability would have to be complemented through combination of improved caring and feeding patterns, improved hygiene and sanitation, reduced drudgery for women and better access to health and nutrition related services. For this purpose, the integration of communication efforts ranges from incorporating direct nutrition education for agriculture extension workers to provision of BCC messages for farmers, mothers and care takers.

The strategy uses following theory and framework to deliver nutrition education and BCC messages.

Stages of Change Model

This model considers behavior change as a process and passes through a continuum of stages viz. pre-knowledge, knowledge, approval, intention, practice and advocacy. An individual in the community may fall in any stages, it is therefore imperative to identify their status, their need and tailor the communication messages accordingly. The model identifies the different hierarchies of society where different approaches and interventions are required to influence the behavior.



Adapted from A Field Guide to Designing a health communication strategy: A Resource for Health Communication Professionals. Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs

Positive Deviance Approach

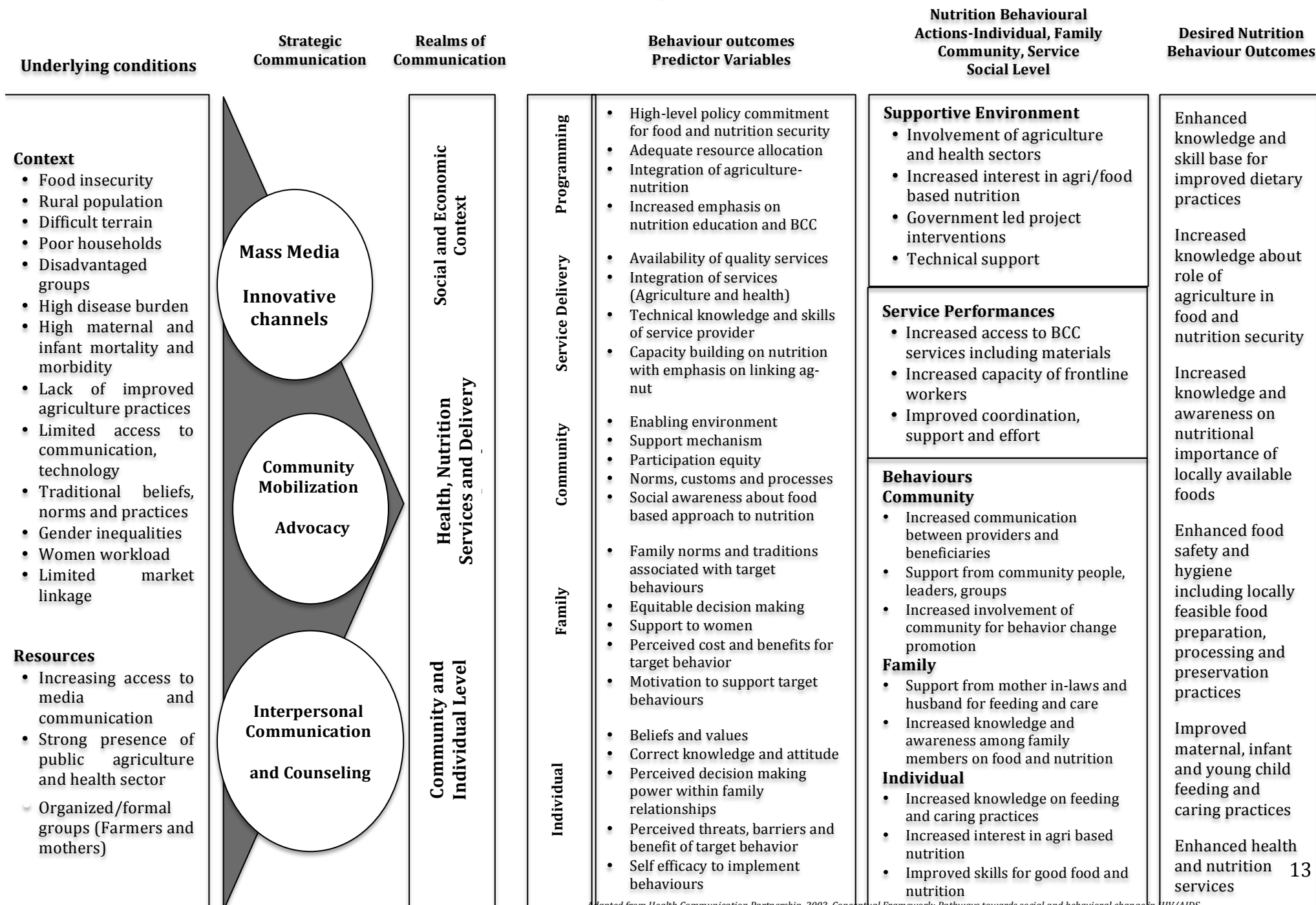
Assessing the practices related to healthy diet, feeding and caring practices in the community identifies positive, good and successful practices, which needs to be encouraged with some additional inputs. The positive deviance approach will guide the strategy to discover affordable and feasible options for pregnant, lactating women and children for improved feeding, care and dietary practices and promote replication of such actions. The BCC efforts will build on the existing positive knowledge and behaviors practiced in the community. This approach identify current feeding and caring practices and explore the reasons for current practices and also understand the constraints along with the motivation

¹⁵ Synder, L.B.(2007). Health communication campaigns and their impact on behavior. *Journal of Nutrition Education and Behavior*, 39:S32-S40

for changing the behavior. Using this approach, the constraints can also be prioritized and solved at local level using local resources with very little effort.

Conceptual framework for Nutrition Education and Behaviour Change Communication for Agriculture and Food Security Project

Revised Draft_July 23



Adapted from Health Communication Partnership. 2003. Conceptual Framework: Pathways towards social and behavioral change in HIV/AIDS

Strategic audiences

The key focus of this project is to reach to the thousand-days mothers, farmers and with the project specific messages in order to use their windows of opportunity as an effective way to influence the key behaviors related to food and nutrition. The primary audience is mothers, which includes pregnant, lactating and with children under two years of age. The approach used in the strategy is to empower women for informed decision-making in their practices.

In order to create an enabling environment at household and individual level, the project will also reach to those people who are in the immediate environment of mothers and children. These people help to mobilize the community, sensitize the community and support to influence their behaviors. These include community leaders, health workers, frontline workers, community mobilizers, FCHVs, Mother's group, farmers' group (crop and livestock), local clubs and networks.

The strategy will also include advocacy with tertiary audiences, which include implementers, managers and concerned stakeholders working in policy formulation and programme planning both at central as well as district level.

Strategic approaches	Audiences
Advocacy	National, Regional as well as District level government officials from MoAD, MoHP and relevant officials from other sectors, Members of Food and Nutrition Coordination Committee at all levels, Media
Social mobilization	Different crop and livestock related groups at the community level, Women's organization, farmers' group, Social club and concerned committees of agriculture and livestock at VDC level
Behavior change communication	Pregnant and lactating women, Mother-in-law, Mothers' group, Frontline workers of agriculture and livestock, farmers (crop and livestock)

Areas to focus

The project aims to improve food security and nutrition in an integrated way through sustainable and diversified agriculture through integrated research and extension, community based nutrition programs and services. Integrated packages of interventions in different sectors are being implemented to create a more sustainable and nutritious food system. Together with communication interventions, this will lead to promotion of diversified diets, improved dietary intake and improved feeding and caring practices with sensitivity to the socio-economic and cultural context.

Following areas will be promoted for BCC purposes:

- Home level food preparation, preservation and processing of locally available nutritive-value foods
- Nutritive value of locally available nutritious and underutilized foods and productivity through home nutrition garden and backyard poultry
- Maternal, Infant and Young Children Feeding and Caring Practices
- Promotion of diversified diet especially for pregnant, lactating and children under two years

- Recipe development/improvement practices for complementary feeding using locally available foods
- Role of agriculture in enhancing food and nutrition security
- Promotion of simple household labor-saving and drudgery-reducing technologies for women to liberate time for self and child care
- Food safety and hygiene including safe drinking water and sanitation
- Use of agriculture, health and nutrition services for improved dietary intake and improved feeding and caring practices

Communication Interventions/Strategy

Advocacy: Advocacy aims at fostering favorable environment for political commitment and policy change to build or strengthen social rules, which further helps to bring about desired change in behavior. The advocacy activities are targeted at political leaders, community leaders, media personnel, community organizations, farmers group, community mobilizers etc. The advocacy activities help in mobilization of locally available resources and services for implementing the desired change in behavior and thereby sustain the positive behavior. The project envisions involving community leaders, political leaders, media personnel, health workers, and community mobilizers in various promotional activities, events celebration, rallies, meeting, and exhibitions to help raise awareness and improve and sustain desired behavior.

Community mobilization: Community mobilization is a process of engaging community to identify community needs, prioritize and identify solution in such a way to increase participation. It serves as a strategy for motivating both primary and secondary target audience to become active participant in behavior change process. The project utilizes the existing community groups, local leaders, FCHV, community mobilizers, school teachers, AFSP field staff and other influential people in the community and involves them in meetings, exhibition, cooking demonstration for their continued support and commitment to raise awareness and support in behavior change. Further peer mothers can also be utilized to inform and share information. The community mobilizers, AFSP field staff, farmers group etc can also utilize existing project platforms like Village model farm (VMF), Home Nutrition Garden (HNG), Farmers Field School (FFS) to sensitize the community.

Communication

Interpersonal communication: Community outreach through interpersonal communication is one of the efficient and effective ways to implement BCC. IPC involves face-to-face or group counseling and interaction with the target audience. Essential elements of interpersonal communication involve health education, interaction, counseling, problem solving, discussion and motivation. Since the main outcome of the project includes dietary intake use of effective mass media during IPC would be more effective for behavior change rather than individual method alone. Proposed IPC activity can be carried out during home visit, health facility visit, FFS, VMF and mother's group meeting either through individual or group counseling through effective utilization of various mass media.

Group/Mass communication: The mass media consisting of print media-poster, newspaper and broadcast outlets like radio, television coupled with other media like folk media I(songs, drama), exhibition etc have important role to play in behavior change communication. Although controversial about the effectiveness the mass media definitely has the capacity to inform and educate people and motivate for behavior change. The program has designed to utilize mass

media like poster, pamphlet to reinforce message delivered through individual and group counseling. Mass media like radio, songs, drama, exhibition, cooking demonstration, is also designed in the project at the national, district and community level to inform and raise awareness among the target group and act as a catalyst for behavior change. The media further can play advocacy role that support sustainable behavior change at community level.

Technical Content and Material Development

Area	Key message/Content	Materials	Uses/Responsibility
Food and Nutrition Security	<ul style="list-style-type: none"> • Importance of food and nutrition security • Interrelation between agriculture, food and nutrition • Food and nutrients • Causes and consequences of food insecurity and malnutrition • Interrelationship between food insecurity and malnutrition • Intergenerational malnutrition cycle • Importance of Golden 1000 days 		
Agriculture for Food and Nutrition Security	<ul style="list-style-type: none"> • Seasonal food availability and crop diversification • Importance of diet diversification and nutrition • Promotion of micronutrient rich foods through nutrition home garden and rural poultry • Promotion of animal source foods for pregnant, lactating and young children • Nutritional importance of local/underutilized foods • Improved food recipes (using different foods that are available during different season) 		
Maternal	<ul style="list-style-type: none"> • Concept of maternal 		

nutrition	<ul style="list-style-type: none"> • nutrition, its importance • Recommended caring practices during pregnancy and lactation • Food requirements during pregnancy and lactation • Healthy timing and spacing • Women drudgery and malnutrition in women 	
Breastfeeding	<ul style="list-style-type: none"> • Early initiation of breastfeeding • Colostrum feeding • Exclusive breastfeeding • Importance of BF • Extended BF for 24 months and beyond • Practice frequent, on demand breastfeeding, day and night • Continue breastfeeding during illness and increase breastfeeding during and after illness • Avoid prelacteal feeding • Avoid bottle feeding • Common problems for Breastfeeding 	<ul style="list-style-type: none"> • Poster • Pamphlet • Breastfeeding Calendar • Counseling card • Flip Chart • Fact sheets • Booklet • Brochure • Leaflet • Flyer • Murals • Caps, • Stickers • Comic sheets, • Newsletters, • Pamphlets, • Umbrellas, • T-shirts • Arm bands • Story boards, • Bags • Name tags • Flyers • Banners • Key holder • Radio spot/Short videos
Complementary Feeding	<ul style="list-style-type: none"> • Timely initiation of complementary feeding • Responsive feeding • Safe preparation and storage of complementary food • Timely feeding in appropriate amount 	<ul style="list-style-type: none"> • Poster • Pamphlet • Breastfeeding Calendar • Counseling card • Flip Chart • Fact sheets • Booklet

	<ul style="list-style-type: none"> • Appropriate food consistency • Adequate meal frequency and energy density • Diversified diet during preparation of complementary food • Feeding during and after illness (diarrhea, ARI) • Existing food taboos on complementary practice • Recipe development using local foods 	<ul style="list-style-type: none"> • Brochure • Leaflet • Flyer • Caps, • Stickers • Pamphlets, • Flyers • Banners • Key holder • Radio spot/Short videos • Cooking demonstrations
Food preparation, processing and preservation	<ul style="list-style-type: none"> • Importance of food processing and preservation • Local practices • Feasible practices for processing and preservation of vegetables, fruits, meat • Improved cooking practices • 	<ul style="list-style-type: none"> •
Food Safety and Hygiene	<ul style="list-style-type: none"> • Household storage techniques • Food safety and how to keep food safe • Personal hygiene • Clean and safe drinking water 	<ul style="list-style-type: none"> •
Social mobilization and role of local stakeholders	<ul style="list-style-type: none"> • Creating enabling environment • Role of community and local stakeholders for food and nutrition security 	<ul style="list-style-type: none"> •

Key activities for BCC

Support group in Mother's Group Meeting: Support group will be functional within the existing mother's group, where the women and caretakers will share their experience on feeding and caring practices among each other. 5-7 members from the mothers group will be selected and discussion will be held every month in different topics, therefore the support group might change depending on the topic of discussion. Sitting arrangements can be made with the experience-sharing members in the inner circle while the rest of the members of the

mother group will sit in the outer circle. Husband, father in law, caretakers can also be involved in the discussion to support and motivate the 1000 days mothers. The support group is expected not only to initiate and share discussion but also motivate other members in the group to adopt recommended behaviour.

Nutrition education: Nutrition is a new component which most of the crop and livestock farmers are not totally aware of. The nutrition education especially embedding nutrition session in the Farmers Field School (FFS) and farmers group helps to sensitize the farmers on importance of diversified diet and nutrition and encourage them towards diversified crop plantation and consumption.

Food Processing and Preservation Unit Establishment: Each VDC of the project districts will have functional food preservation and processing units, where there will be demonstration of improved local food preservation and processing practices for food and nutrition security combined with cooking demonstrations for the mothers, farmers and care takers from the local community.

Cooking demonstration: The FCHV in coordination with the AFSP field level staff will conduct cooking demonstration either at the community level or in a small group involving 5-10 households having pregnant or lactating women or household with children under 2 years. The cooking session will be lead by FCHV and field facilitator using mobile kitchen. Preferences in cooking demonstration will be provided to locally available nutritious food. The cooking demonstration will also provide opportunity for practice session where the mothers and caretakers will themselves practice the cooking techniques in groups. Effective mobilization of existing community groups, farmers group, local leaders will be made to make the program more effective. The cooking demonstration will reinforce the message delivered during interpersonal communication and also during food exhibition.

Celebration of key events: Key events like breastfeeding week, nutrition month, iodine month and other events will be observed by conducting rallies, promotional activities, drama, songs to commemorate the day and henceforth raise awareness on nutrition and contribute to improvement in dietary behavior. It is however important to ensure that the political and local leaders, respective organizational representative, health workers, FCHVs, school teachers, farmers group, mothers group show ample amount of participation in the event .

Food exhibition: Exhibition program showcasing/displaying the locally available nutritious food with maximum utilization of poster, pamphlet, and demonstration will be made to enhance the knowledge on locally available nutritious diet and thereby contribute to improved dietary intake. Wherever possible the prepared food from available nutritious crop would also be provided to taste to encourage the community people to improve nutritious dietary intake.

Innovative program (healthy baby competition, drama): Various innovative programs like healthy baby competition, drama will be conducted to create enthusiasm among the community and encourage in improving dietary intake among the children. Effective mobilization of the pre-existing community groups, farmers group, and community mobilizers has to be done to ensure maximum participation from the entire household fulfilling the requirement criteria.

Radio program: Radio program will be broadcasted including drama, interview with the health personnel, radio competition, sharing of case studies, success stories on contextual basis etc in the local radio station. The program to be aired should focus on nutrition, MIYCN, dietary diversity, food safety and hygiene related issues. Further opportunities of discussion and Q/A session with nutrition focal person of the D/PHO will be explored to clarify the target audience of the existing myths and taboos prevalent in the community related to dietary intake practice.

Complementary Feeding Club (CF Club): Establishment of Complementary feeding club including the lactating mothers and mothers with children less than 2 years is expected to generate enthusiasm and help raise awareness on nutrition and dietary feeding practice during complementary feeding. The CF club with support from project facilitator and FCHV will act as a

platform while organizing exhibition, cooking demonstration program, discussion with crop farmers group, livestock farmers group, caretakers, agriculture frontline workers etc.

Village Model Farm (VMF): The project has envisioned establishment of at least 3 village model farms in each project VDCs during the project duration. Each VMF will be established consisting of 2 mothers group comprising of at least of 50 female participants. The target groups eligible for the VMF are pregnant mothers and women having children less than 2 years with particular focus on marginalized and disadvantaged group. Priority will be given to FCHV while establishing VMF. The VMF will act as a forum for delivering and reinforcing nutrition related BCC messages including demonstration.

Home Nutrition Garden (HNG): The learning and demonstration of the village model farm will be replicated and practiced by each individual member (50 members) in home nutrition garden. Each of the members will be provided with various vegetables and fruits seeds/saplings as well as chick and goat to increase production and thereby utilization.

Folk media: Folk media refers to song, drama, stories and are effective means to engage community in health communication. The key nutrition messages will be incorporated in the drama, songs. The folk media can be used individually or in conjunction with other means of communication to reinforce the nutrition message for behavior change.

Utility media: Utility media refers to cap, t-shirt, umbrella, shopping bag etc. This media has received great importance and acceptance as the product can be used. This media provides opportunity to initiate dialogue and promote and repeat message to provoke desired behavior change. The utility media can also be used in various events like day's celebration, competition, nutrition exhibition where there would be large participation and flow of community to raise awareness.

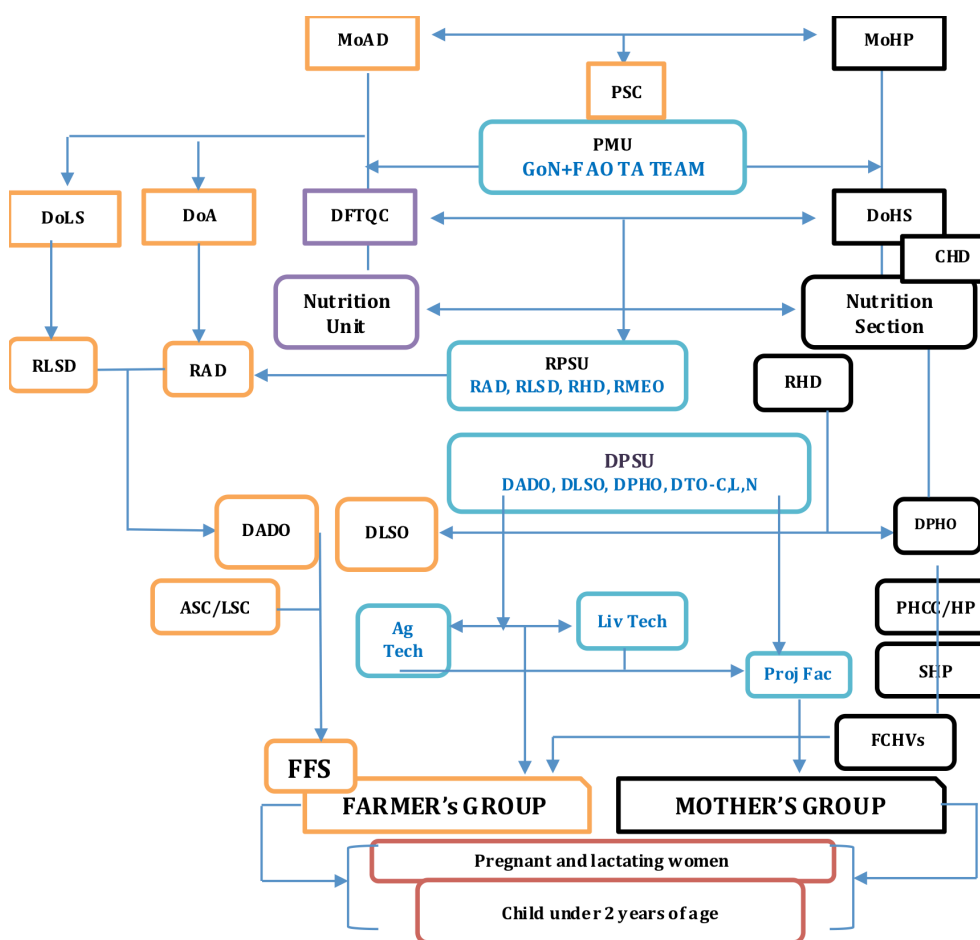
Visual media: Visual media like poster, pamphlet, flip chart, job aid will be developed to facilitate counseling and other communication activities.

Community Dialogue/Discussion: An open discussion with community members can be conducted in which members are engaged in discussing issues related to food and nutrition.

Behaviour Change Communication Implementation Mechanism

The objective of the social and behavior change communication would be achieved through mobilization of health mother's group and farmer's group in the community who would be supported by the frontline workers from health and agriculture sectors viz. female community health volunteers, Junior Technicians (Crop and Livestock). The responsibility for group formulation, community mobilization, coordination, facilitation, counseling on nutrition and technical support at the household and community level rests with the project facilitators who are based in each VDCs of the project area.

Detailed implementation arrangement for BCC Service Delivery



The community level activities related to social and behavior change communication will be monitored, supervised and supported by the technical staff from agriculture and livestock service centers and peripheral health facilities. The district level government officers pertaining to livestock, agriculture and health would, in turn, support them. The District Project Support Unit (DPSU) comprising of heads of district government agencies- health, livestock and agriculture and the technical officers will coordinate, support, monitor and supervise the BCC activities at the community level and also

report to the regional and the central levels. The detail monitoring and evaluation plan as outlined in the M&E strategy would be followed. An Operational Guideline with detailed with specific roles and responsibilities will be developed for planned nutrition and BCC activities.

Training and capacity building:

Training and capacity building is deemed important to continue imparting knowledge and to further enhance knowledge and skill of the health service provider, FCHV, project based field staff etc. Likewise orientation program to familiarize the community leaders, agriculture frontline workers, community mobilizer etc on nutrition and behavior change communication will be provided to facilitate in improved dietary practice and nutrition. The training program should focus on providing comprehensive information on agri/food-based nutrition, integration of agriculture, nutrition and health, locally available nutritious food, MIYCN. The training module will presumed to be carried out at different level. Training will be carried out in 2 batches at the central and district level and another at the community level. Extensive training on agri based nutrition will be provided at the facility level with participation by RHD, RPSU, D/PHO officials, DTO, DADO, DLSO, VDC, HF worker, school teacher, agriculture technician, livestock technician, while hands on training and skills will be provided in the community level training with participation from citizen awareness centre, ward citizen forum, FCHV, mothers group, farmers group etc. Further guidelines will be developed on nutrition exhibition, healthy baby competition, nutrition corner, day's celebration etc to facilitate the project staffs on nutrition component.

Job Responsibilities for BCC

Central Level Agencies

- Development of BCC strategy, training manuals and BCC materials and make available to the district on time
- Coordinate with concerned agencies at the central level viz. PMU, CHD and DFTQC for timely planning and execution of activities
- Monitoring and supervision of activities and technical backstopping to the regional and district team for BCC implementation
- Liaise with all district level agencies for better coordination and carrying out planned activities
- Distribute the developed BCC materials timely to the district and beyond institutions for regular BCC service delivery

District Technical Officer (DTO):

- Capacity building of health facility staffs working at district and VDCs, school teacher, AG technician, livestock technician in coordination with D/PHO/DPSU and provide technical backstopping
- Monitor and supervise closely at the VDC, community and household levels to ensure that training activities are taking place as defined in the Project Implementation Plan.

- Liaise with D/PHO for the implementation of the BCC Programme and provide support for the preparation, implementation, capacity building and training, review and assessment.
- Support VDC, HFoMC, Female Community Health Volunteers (FCHVs), PF and farmer groups for BCC training (recipe development)
- Guide and facilitate FCHV, mothers' groups, farmers group, project facilitator for implementation/conduction of nutrition exhibitions, food/cooking demonstrations, event/days celebration, healthy baby competition and other BCC activities at VDC and ward levels
- Under the guidance from the Project Training Specialist, Agriculture and Livestock Specialists and in collaboration with District Technical Officer (Livestock and Agriculture) identify needs, and contribute to the design of the curriculum, lesson plans, guidelines and procedures for different training packages related to nutrition to be embedded in ToT, refresher courses and FFS and provide backstopping support in their implementation
- Coordinate with agriculture and livestock technicians for the organization of other nutrition related trainings in FFS, VMF, and HNG for the farmers and mother groups, participate in the training and act as a resource person.
- Carry out field supervision based upon a supervision schedule approved by DPSU to observe the activities of BCC providers at the community level.
- Assess the effectiveness of the BCC Programme by visiting households and interacting with mothers' groups and farmer groups
- Coordinate regularly with local radio on timely and quality broadcast of agriculture and nutrition related messages radio program
- Effective monitoring of the BCC activities as per the M&E plan devised in the BCC strategy

District /Public Health Officer (D/PHO)

- Provide technical guidance in effective implementation of BCC activities
- Support and motivate the HF workers in project VDCs in effective implementation of the BCC activities
- Supervision visit to project VDCs to observe and monitor the BCC activities at the community level
- Assess the effectiveness of the BCC program by discussing about the activities in the monthly meeting
- Observe in healthy baby competition, exhibition and other BCC activities wherever possible
- Participate in DPSU meeting and advocate on nutrition matters

Health Worker (HW)

- Capacity building of Service Provider (PF, AT,LT), FCHV, Mothers group, Caretakers (Mother in law, husband), Farmers Group, Agriculture frontline worker
- Support and conduct training for nutrition session in FFS, VMF and HNG and technical backstopping
- Provide technical backstopping to FCHV, SP, Framers group during the project period to effectively run the nutrition BCC activities
- Provide nutrition counseling with maximum utilization of visual and print media during health facility visit

- Support and mobilize FCHV and PF in implementation of BCC activities at the community level
- Guide and facilitate SP, FCHV, Mothers group, Framers group for implementation of BCC activities like cooking demonstration, nutrition exhibition, healthy baby competition etc
- Participate in BCC activities and campaign at the community level.
- Advocate on nutrition issues in meetings and forums
- To motivate local leaders, political leaders to participate in BCC activities (rallies, exhibition, demonstration) at the community level
- Distribute nutrition related poster, pamphlet to community during health facility visit

Female Community Health Volunteer/Peer Counselor

- Provide individual and group counseling in nutrition component during home visit through poster, pamphlet, flip chart, job aid
- Conduct nutrition session and support group during health mothers group meeting
- Raise awareness and effective mobilization of community to increase participation in cooking demonstration, food exhibition, and healthy baby competition.
- Establish and maintain nutrition corner in mother group meeting and ensure re supply of materials in nutrition corner whenever necessary
- Distribute nutrition related visual media materials to community

Project Facilitator

- Facilitate and support in effective conduction of nutrition session during VMF and HNG
- Support in establishment and maintenance of nutrition corner
- Support and conduct cooking demonstration, food exhibition, healthy baby competition
- Conduct group level counseling to target groups to sensitize on nutrition messages with effective use of poster, pamphlet, flip chart
- Conduct regular monitoring of the BCC activities as described in the BCC M&E strategy
- Coordinate with FFS group to organize nutrition session
- Facilitate mothers group in adoption of BCC messages

Monitoring and Evaluation

The monitoring and evaluation mechanism for the behavior change communication of this project will align with the Project Management Information System, which will use the government system from central to community level. The monitoring and evaluation system will use following result framework for nutrition and BCC activities.

Result Framework for Behaviour Change Communication

INPUT	FAO TA INPUT	OUTPUT	INTERMEDIATE RESULT	OUTCOME	IMPACT
<ul style="list-style-type: none"> Establishment of village model farm Establishment of home nutrition garden Enhanced capacity of farmers on crop and livestock productivity through FFS 		Increased availability of locally produced nutrient dense and micronutrient rich food	Increased access to locally produced nutrient dense and micronutrient rich food		
<ul style="list-style-type: none"> Training of women group on food preparation, preservation and processing Establishment of food preparation, preservation and processing unit 	<ul style="list-style-type: none"> Assist PMU, CHD and DFTQC in technical back stopping Assist in the development of training tool kits Assist in conducting training events Facilitate in implementation, technical back stopping and monitoring 	Increased knowledge and skill on food preparation, preservation and processing	Improved practices on food preparation, preservation and processing		
<ul style="list-style-type: none"> Training of women's group on nutrition recipes using locally available foods 		Increased knowledge of women's group on nutrition recipes using locally available foods	Improved practices by women's group on nutrition recipes using locally available foods		
<ul style="list-style-type: none"> Training of agriculture and livestock technicians on nutrition Training of farmers group on nutrition 		Increased knowledge of farmers and households about nutritional importance of locally available food	Improved practices for pro-nutrition by the farmers		
<ul style="list-style-type: none"> Training of health and agriculture functionaries on MIYCN Training of health and agriculture functionaries on food hygiene and safety Training of health and agriculture 		Increased knowledge and skill of nutrition at household level	Improved nutrition behavior at household level	Improved dietary and feeding practices by the HH for improved nutrition esp by pregnant, nursing and children of 2 years of age	Enhanced food and nutrition security