





Royal Government of Bhutan

# BEHAVIOR CHANGE COMMUNICATION STRATEGY FOR FSAPP

## To Improve Food and Nutrition in the Communities



Photo courtesy: Tarayana Foundation

2019 to 2022



Food and Agriculture Organization of the United Nations



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## List of Abbreviations

ANC	Antenatal care
BAFRA	Bhutan Agriculture and Food Regulatory Authority
BCC	Behavior Change Communication
BHU	Basic Health Unit
BMIS	Bhutan Multi Indicator Survey
CRP	Community Resource Person
CSO	Civil Society Organization
FAO	Food and Agriculture Organization
FG	Farmer Group
FSAPP	Food Security and Agriculture Productivity Project
GAFSP	Global Agriculture Food Security Program
НА	Health Assistant
ICTD	Information Communication and Technology Division
IEC	Information, Education and Communication
IFA	Iron Folic Acid
IPC	Interpersonal Communication
MoAF	Ministry of Agriculture and Forest
МоН	Ministry of Health
MoE	Ministry of Education
NFE	Non Formal Education
NNS	National Nutrition Survey
PNC	Postnatal Care
SAFANSI	South Asia Food and Nutrition Security Initiative
SAM	Severe Acute Malnutrition
SEARO	South East Asia Regional Office
SHC	School Health Coordinator
ТоТ	Training of Trainers
UNICEF	United Nations Children's Fund
SEM	Socio Ecological Model
WHO	World Health Organization
WFP	World Food Programme
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## Acknowledgement

The Department of Agriculture (DoA) would like to gratefully acknowledge the financial and technical support provided by FAO through Food Security and Agriculture Productivity Project (FSAPP), and South Asia Food and Nutrition Security Initiatives (SAFANSI) Project, Tarayana Foundation to develop the Behavior Change Communication Strategy to Improve Food and Nutrition.

The preparation of the Strategy was led by FSAPP and SAFANSI, but the outcome was the effort of the team members from relevant ministries, Royal Government of Bhutan. DoA would like to acknowledge the contributions and active participation of the officers from the Department of Public Health, MoH and the Department of School Education, MoE throughout the entire period of the assignment. Numerous reference materials generously provided by the Nutrition Division and Health Promotion Division, DoPH were very useful in the preparation of the present BCC strategy. The support received from the concerned departments, divisions and programs in the Ministry of Agriculture and Forest, particularly BAFRA and ICTD, has been outstanding, for which we are equally grateful.

Without administrative support and office facilities and conducive working environment, the process would have been very difficult. Tarayana Foundation is duly acknowledged for providing office facilities and other logistic arrangements on time and in efficient manner during the preparation of the strategy document. DoA is also very grateful to all those who worked tirelessly behind the scene and helped to complete this assignment on time with satisfaction.

Finally, DoA would like to extend sincere gratitude to Mr. Muhammad Shafique, FAO-TA, Chhimi Dorji, SAFANSI Project Coordinator and Jigme Wangdi, BCC consultant for bringing out the strategy document on time. We would like to thank all the Technical Working Group members from MoH, MoE, MoAF and Tarayana Foundation for providing timely technical expertise and inputs. DoA is also grateful to all Dasho Dzongdags and field colleagues of FSAPP Dzongkhags, FAO, UNICEF and PMU, FSAPP for their active participation and constructive feedback on the strategy document during the stakeholders' workshop and the consultation meeting.

## Glossary

**Audience:** Audiences may be segmented into primary, secondary and tertiary audience. Primary audience referred to the people whom the BCC objectives are focused die. Pregnant and lactating mothers, the secondary audience is made up of people who influence the practices of the primary audience (i.e. family members) and tertiary audience who create enabling environment for primary audience to perform the behaviors such as village leaders, volunteers and health staff

**Behavior Change Communication:** An interactive process with communities to develop tailored messages and approaches using a variety of communication channels to develop positive behaviors; promote and sustain individual, community and societal behavior change; and maintain appropriate behaviors

Channel: A medium through which a message is transmitted to its intended audience, e.g. TV, radioChupon: A village messengers who disseminate information to the community membersChiwog: An administrative unit which is comprised on 4-5 villages or 50-80 households. The average population of a chiwog is around 3000 persons

Folk or local media: A local channels of communication that are usually culture or community specific

**Gewog:** A gewog or sub-district is comprised of 5-6 chiwogs. Agewog has 350-400 households **Gup:** Gup is the head of the gewog who is elected by the community

**Information, Education and Communication:** Development of communication materials such as posters, pamphlets and flip charts targeted at influencing behaviors among specific groups **Interpersonal Communication:** is the process by which people exchange information, feelings, and meaning through verbal and non-verbal messages: it is face-to-face communication

**Multipronged or media mix:** The use of more than one medium for communication purposes. The specific combination or mix is determined by the characteristics of the audience

**Positive Deviance:** An asset based behavior change approach which builds on the positive behaviors of the community members and then shares those culturally appropriate behaviors with other community members to influence behavior changes

**Self-efficacy:** The belief and confidence in one's ability to do something successfully. Self-efficacy is facilitated by an enabling environment such as developing self-efficacy of lactating mothers to prepare diverse food through cooking sessions **Stakeholder:** A person or group with an interest in the outcome of an intervention

**Tshechu:** A local festival which takes place on monthly basis in which people gather and donate foods **Tshogpa:** Tshogpa is a representative of a village, or a cluster of village

#### 1. Introduction

Malnutrition and poor diets constitute the number-one driver of the global burden of disease (IFPRI, 2016). Malnutrition refers to deficiencies, excesses, or imbalances in a person's intake of energy and/or nutrients. The term malnutrition addresses 3 broad groups of conditions: 1) under nutrition, which includes wasting (low weight-for-height), stunting (low height-for-age) and underweight (low weight-for-age);2)micronutrient-related malnutrition, which includes micronutrient deficiencies (a lack of important vitamins and minerals) or micronutrient excess; and 3) overweight, obesity and diet-related non-communicable diseases (such as heart disease, stroke, diabetes and some cancers) (WHO, 2018).

Malnutrition is a global concern thwarting development with undesirable human consequences. The burden of malnutrition across the world remains very high. Malnutrition contributes to more ill health than any other cause. Children under five years of age face multiple burdens. An estimated 150.8 million or 22.2% (almost 1 in 5<sup>th</sup>children) are stunted, 50.5 million or 7.5% are wasted and 38.3 million or 5.6% are overweight. Overweight and obesity among adults are at record levels with 38.9% of adults overweight or obese. Women face a higher burden of the various forms of malnutrition than men. About one third of all women of reproductive age have anemia (DIPRL, 2018).

Under nutrition puts children at greater risk of dying from common infections, increases the frequency and severity of such infections, and contributes to delayed recovery. Around 45% of deaths among children fewer than 5 years of age are attributed to under nutrition (WHO, 2018). These mostly occur in low- and middle-income countries. In addition, the interaction between under nutrition and infection can create a potentially lethal cycle of worsening illness and deteriorating nutritional status. Poor nutrition in the first 1,000 days of a child's life can also lead to stunted growth, which is irreversible and associated with impaired cognitive ability and reduced school and work performance (UNICEF, 2016; Grantham-McGregor, 1995).

Besides other health concerns, malnutrition is widely prevalent in South Asian Region where half of the world's malnourished children are to be found in just 3 countries Bangladesh, India and Pakistan (Das et.al., 2008). South Asia is the worst affected region due to poverty, food insecurity, natural and man-made disasters, high rates of low birth weight, unhygienic conditions, unsatisfactory breastfeeding and weaning practices and the poor status of women (De Onis et.al., 2000).

The Royal Government of Bhutan is no exception. Bhutan's National Nutrition Survey (NNS) conducted in 2015 indicates that the child stunting prevalence still stands at 21.2%. Although stunting has dropped from 33.5% in 2010, regional disparities remain persistently elevated with 29.1% prevalence rate in the Eastern region followed by 18.5% and 16.2% in the Central and Western regions respectively (NNS, 2015). Stunting or chronic malnutrition is a public health concern because it irreversibly impedes child's development and learning capacity, effects that last into adulthood and negatively impact on an individual's overall productivity. The prevalence of acute malnutrition (wasting) at the national level stands at 4.3% with the highest rate in the poorest section (7%) of the society. Severe wasting (SAM- Severe Acute Malnutrition)<sup>1</sup> is> 1 percent in all wealth quintiles (Q1 4.3 percent, Q2 1.8 percent, Q3 1.2 percent and Q4 2.6 percent) Q5, which is of severe public health

<sup>1.</sup> Weight for height <-3 standard deviation as per WHO reference standards.

significance as per WHO standards. Children with SAM have nine times higher risk of death than their normal counterparts.

The prevalence of anemia in women across the population remained a concern to the Royal Government of Bhutan. The NNS15 shows that 43.8% of children (6-59 months), 31.3% of adolescent girls (10-19 years), 34.9% of non-pregnant women (15-49 years) and 27.3% of pregnant women are anemic. Very low dietary diversity with very little intake of iron rich food and micronutrient are suspected to be the possible reasons of anemia in adolescents and pregnant women. On the other hand, concern has been raised on the prevalence of overweight and obese children standing at 2.2%.

Dietary diversity remains an issue as 67% of Bhutanese people consume less than the recommended five servings (or 200 grams) of fruits and/or vegetables per person per day. Vegetables consumed are largely confined to potatoes and chilies, lacking range of vitamin and mineral requirements.

## 1.1. Rationale for the Behavior Change Communication Strategy

Child nutritional status is dependent on caregivers' feeding and caring practices (Kumar et.al., 2006) adequate household food security (Saha et.al., 2008) access to health services and sanitation (Humphrey, 2009) and other factors. Caring practices include care of pregnant and lactating women, breastfeeding and complementary feeding, food preparation, and health seeking and hygiene practices. The adoption or performance of these desired behaviors depends on the knowledge, beliefs, self-efficacy, access to food and health care and social support from family and the community (Engle et.al., 1996).A well-informed and context appropriate Behavior Change Communication (BCC) strategy not only improves the knowledge, attitudes and skills of the target communities but also creates a supportive environment at household, community, health facility and policy levels for them to practice these behaviors on a sustained basis. In various contexts, the adolescent, mothers' and children's health and nutrition status has been improved by addressing inappropriate feeding and care giving practices through culturally appropriate and context specific behavior change communication interventions (Menon et.al., 2005; Kennedy et.al., 2018). Many studies have demonstrated that if the behavior change strategies are built on the local strengths and appreciate the existing positive behaviors of the community members, the change is more acceptable, fast and sustainable (Machado et.al., 2014).

The literature review informed that there have been efforts to raise awareness on the diversity of diet or on a balanced food plate and several health-related interventions have been carried out, using antenatal visits and child immunizations as opportunities for hospitals to convey messages in Bhutan. However, most food based nutrition guidelines and information are in English and remain in written form, excluding less educated and illiterate people. There was a risk of conflicting information and advice from grandparents, folklore, hospitals, and media and so there was a strong need to develop a culturally appropriate and context specific BCC strategy that appreciate and build on the local social context and provide consistent and harmonized messages across media and materials to instigate socially-cognizant behavior change for improved nutrition. Therefore, a well-informed and tailored BCC strategy is developed to engage communities, target audiences and stakeholders in a systematic manner to bring about sustained positive behavior changes to improve the nutritional outcomes.

BCC activities will focus on diversifying the food plate and, as such, target pregnant women (to consume larger quantities of nutrient-rich foods), young mothers to prepare complementary foods including locally-available fruits and vegetables, children, and adolescent girls (encouraging the

consumption of iron-rich foods, considering plant-based alternatives to animal products as many girls are said to be vegetarian). It will emphasize on the importance of first 1000 golden days (Cusick and Georgieff) to improve antenatal care, diet during pregnancy, early initiation of breastfeeding, colostrums, exclusive breastfeeding and diverse complementary feeding practices by making mothers and caregivers aware of childhood nutritional problems and enhancing their knowledge, confidence and skills in order to take positive actions.

## 1.2. Context – Behavior Change Communication Strategy Implementation

The Food Security and Agriculture Productivity Project (FSAPP) is funded by The Global Agriculture and Food Security Program (GAFSP) and World Bank and being implemented in 5 dzongkhags including Chhukha, Dagana, Haa, Samtse and Sarpang. The South Asian Food and Nutrition Security Initiative (SAFANSI) project is being implemented by Tarayana Foundation in Tading Gewog under Samtse dzongkhag. These dzongkhags are selected primarily because of the higher incidence of poverty, malnutrition, low agricultural productivity, and inaccessible markets in the area. A total of 24 gewogs were identified from the 5 target dzongkhags for the project implementation.

These projects will provide an opportunity to pilot the BCC strategy in the selected 24 gewogs. The Community Resource Persons (CRPs) will be the key implementing agents at the community level. The CRPs will be identified and trained in communication and facilitation skills and equipped with the Information Education Communication (IEC) materials. Initially, CRPs will be coordinated by the extension agents for supervision and guidance. However, in the scale-up stage, the CRPs need to be institutionalized with the system for supervision and sustainability of the strategy. The BCC strategy is an evolving document and the FSAPP and SAFANSI projects will help refine the tools and approaches which would be replicated or scaled up at the national level.

## 2. Behaviour Change Communication Strategy

Behavior change communications an interactive process with individuals and communities to promote positive behaviors which are appropriate to their culture and context in order to address their pressing health problems. This in turn provides a supportive environment at household, community and health facility level which enable people to initiate, practice, sustain and maintain positive and desirable behaviors outcomes (UNPF, 2002).

BCC employs a systematic process beginning with literature review, behavior analysis followed by communication planning, implementation and monitoring and evaluation. Target audiences are carefully segmented, messages and IEC materials developed and pre-tested, and interpersonal communication (such as mothers support group sessions), local media (which include community radio, local festivals) and mass media (which include radio, television) and community mobilization are used to achieve defined behavioral objectives<sup>2</sup>. BCC enhances individual behaviors and household practices, promotes collective actions in communities, improves the delivery of nutrition counseling services and the demand for these services, and enhances the overall enabling environment for good nutrition outcomes.

The BCC strategy is designed based on solid principles of behavior change. Social, psychological and educational researches have shown that behavioral change occurs and is maintained when

 $<sup>\</sup>label{eq:2.2} \texttt{Behavior Change Communication} - \texttt{MEASURE Evaluation}". www.measureevaluation.org. \ \texttt{Retrieved 2017-03-23}.$ 

interventions incorporate particular principles of behavior change. Therefore, the BCC strategy on nutrition will incorporate the key principles of three theoretical models i.e. Socio-Ecological Models, Social Learning Theory and Steps to Behavior Change to facilitate the process of change in the communities. The BCC strategy on nutrition will utilize multi-pronged communication approaches including various communication channels such as interpersonal communication (IPC) through community resource persons (CRPs), community based local media such as community radio, street theatre, songs and cultural festivals (*Tshechus*) and mass media including national radio and television to reinforce the nutritional messages and behaviors. The use of mix channel approach will help reinforce messages through various media to maintain the interest and ensure the retention of messages in the target communities.

The schools being an effective channel of communication will be engaged building on the existing school-based interventions such as school feeding programme, school health (WASH) programme and school agriculture programmed. Some interactive communication methods such as role plays, street theatres and school-based songs, quiz and speech competitions will be organized to sensitize students/adolescents on the importance of nutrition, food and hygiene.

## 2.1. Behavior Change Objectives:

The overall objective is to improve nutrition related behaviors of adolescents, pregnant women, lactating mothers, families and those who influence them. Specific objectives are:

- Improve nutrition knowledge, attitudes and behaviours regarding stunting, wasting, obesity and diversity of complementary feeding
- Increase knowledge and awareness on nutrition aspects of locally available fresh foods and diversified diet at the household level
- Support local food preparation practices, including proper food handling and hygiene
- Create enabling environment for pregnant and lactating mothers at the household and community level to enable them to follow the desired nutrition behaviours
- Improve the capacity of CRPs/volunteers in interpersonal communication and facilitation skills to improve their message delivery and interaction with communities

## 2.2. Process of Strategy Development:

Solid understanding of the context, target audiences, existing behaviors and social norms is a prerequisite for developing a well-informed BCC strategy. The BCC strategy for nutrition is developed based on the review of the existing literature, policies, strategies and intensive consultative processes with the key stakeholders. Based on a context, target audiences, existing behaviors and social norms, the key messages were developed and preferred channels of communications were identified. A BCC nutrition technical working group was formed consisting of key stakeholders including Bhutan Agriculture and Food Regulatory Authority (BAFRA), Ministry of Education (MoE), Ministry of Health (MoH) and Ministry of Agriculture and Forests (MoAF) to validate the proposed activities and provide technical inputs and insights in the process of strategy development.

## 3. Guiding Principles of Behaviour Change Communication

Following principles form the basis of the BCC strategy for food and nutrition:

## **3.1. Employ Evidence-Based Communication**

Evidence based programming is a systematic approach to behavior change communication whereby the messages and interventions are supported by data, resulting in reduced speculation and guesswork. BCC strategy is developed based on the literature review of available researches and surveys to understand the existing behaviors, barriers, perceptions and behavioral determinants to develop a well-informed BCC strategy.

## **3.2.** Build on Appropriate Theoretical Models

The BCC strategy is guided by appropriate behavioral change theories to facilitate the process of change. The behavior change theories provide useful information on the range of factors that influence behavior. The BCC strategy uses concepts of Socio-Ecological Model (SEM), Social Learning Theory and Steps to Behavior Change to facilitate and expedite the process of behavior change.

## 3.3. Leverage Existing Resources

Given the large amount of work that has already been done to develop IEC materials for nutrition and hygiene by MoH and other organizations in Bhutan, BCC communication strategy will, when appropriate, build on these materials and will use or modify to avoid any duplication or confusion on the part of communities.

## 3.4. Target Knowledge and Skills

The behavior change will not only provide information to increase knowledge and awareness but also provide practical and interactive opportunities to practice and learn positive behaviors. The cooking sessions will provide lactating mothers a hands-on experience to practice cooking of some nutritious fresh vegetables and foods, hygiene behaviors and active feeding.

## 3.5. Apply Multi-Pronged Communication Approach

Multipronged or mix channel approach will be used to reinforce messages through variety of media enhancing effectiveness of communication and reach the target audiences. BCC will use interpersonal communication, local or folk media and mass media to reinforce messages.

## 3.6. Utilize Technology for Message Dissemination

In light of the increasing coverage of mobile phones in both urban and rural areas of Bhutan, efforts will be made to leverage mobile phones as a communication channel to disseminating BCC messages to pregnant women and lactating mothers. *Chupons* will be used to disseminate nutrition and hygiene related messages through popular WeChat and Facebook to mothers on regular basis.

## 3.7. Build Capacity of the Community Resource Persons

IEC material is important, but it is ineffective unless the community volunteers know how to use it during the community sessions. The CRPs will be trained in communication and facilitation skills so that they can properly use IEC materials and conduct participatory support groups with mothers.

## 3.8. Ensure Social Inclusion

The community members from all segment of society will have equal opportunities to participate in nutrition sessions. There will be no discrimination based on social class, geographical location or

political affiliation. The CRPs will divide the households in their concerned chiwogs in equal parts to ensure maximum coverage of health education activities to the target communities.

## 3.9. Strengthen Intersectoral Collaboration

Effective implementation of the BCC strategy requires strong collaboration and commitment by various sectors therefore, all key sectors especially agriculture, health and education will be engaged in BCC activities at all levels to make the best use of resources

## 3.10. Ensure Gender Equality

The BCC interventions will be gender sensitive and encourage equal participation of men and women in the community-based activities. The CRPs will organize women support group at accessible and culturally appropriate places and events so that pregnant and lactating women can actively participate.

## 4. Key Drivers of Malnutrition

The literature review, national nutrition surveys, existing strategies and consultative workshops help identify the key drivers of malnutrition which need to be addressed through behavior change communication. The Nutrition Framework of UNICEF (fig 1) is used to identify and organize the key drivers under three areas i.e. Access to Food, Care and Health and Hygiene. To address the identified behaviors, key messages are crafted as 'cue for actions' which will be promoted through various behavior change communication activities and culturally appropriate communication channels. The messages will be reinforced through a multi-pronged communication approach using interpersonal communication through community resource persons, local media such as community radio, community rituals (*Tshechus*), community messenger (*chupon*), role-plays and mass media which include radio and TV. Schools will also be engaged to target the students as change agents. The BCC approach will not only focus on the message delivery but also create participatory opportunities for the target communities to practice these behaviors during interactive cooking sessions to improve their nutrition and hygiene behaviors.



#### Figure 1: UNICEF's Conceptual Framework for causes of nutrition, health and survival

#### 4.1. Access to Food

Access to food is defined as sustainable access to safe food of sufficient quality and quantity to ensure adequate intake and a healthy life for all members of the family<sup>3</sup>. Following problems were identified that affect the access to food of pregnant and lactating mothers and children in Bhutan.

#### 4.1.1. Priority Behavior 1: Knowledge and Awareness of Child Malnutrition

Primary audiences: Adolescents, pregnant women, lactating mothers,Secondary and tertiary audience: Family members, community resource personsExisting behaviors (context)

Based on the literature review and nutrition survey (NNS 15) following behaviors were identified:

- Stunting prevalence stands at 21.2% at the national and even higher in rural areas (26.1%) than in urban areas (16.0%) (NNS15)
- Some communities are not aware of the nutrition issues especially stunting and have limited understanding of their causes, significance, and how to prevent them
- The stunting is not recognized as under nutrition and height was never used to assess nutritional status in the community
- Some communities are not aware of what constitutes good nutrition and nutritious food
- The communities do not understand the concept of eating a variety of foods so as to provide the balance of nutrients needed for normal growth and development (Atwood et.al., 2014)

#### **Behavioral Determinants**

• Lack of knowledge and awareness of malnutrition especially stunting

<sup>3.</sup> Nutrition Conceptual Framework, UNICEF

- Lack of understanding on the importance of 1000 days for mother and child
- Lack of understanding of what constitute a nutritious food

## **Behavior Change Objectives**

- Increase knowledge and awareness on stunting, its causes and how it can be prevented
- Enhance the understanding and importance of 1000 golden days for mother and child

## **Key Messages**

- 1000 Golden days' period is very important which start from the moment a child is conceived in the mother's womb until the baby is 2-year-old (MoH, 2018)
- During the 1000 golden days, right nutrition for both mother and baby has great impact on the physical growth and intellectual ability of the child
- Diets of poor nutrition quality in pregnancy, infancy and early childhood causes stunting
- Provide diverse complementary diet consisting of all diet groups to your child to fulfill his/her nutritional requirements
- Every day, feed a variety of locally available fresh vegetables and foods to your baby to make sure s/he gets all the nutrients to grow well

## **BCC activities and IEC materials**

- Flip charts (job aids) for CRPs will be developed and distributed to ensure consistency of messages on nutrition at the community level
- Pamphlets containing short messages linking health benefits will be developed and shared
- CRPs will conduct nutrition support sessions with pregnant women and lactating mothers to sensitize them on malnutrition and what constitute them

## **Communication Channels**

- Develop radio and TV spots to create awareness of various forms of malnutrition and their causes and reinforce positive nutrition behaviors on regular basis
- Develop videos on nutrition and share with mothers during support groups
- Capitalize on local festivals/ rituals (*Tshechus*) to reinforce nutrition messages and behaviors

## 4.2. Caring Practices

Caring practices such as breastfeeding, appropriate complementary feeding, as well as hygiene and health seeking behaviors support good nutrition. If these practices are disrupted, it can lead to poor dietary intake and increased infection, both of which are underlying causes of under nutrition (fig1). Following behaviors regarding weak Caring practices were identified from communities in Bhutan:

## **4.2.1.** Priority Behavior 2: Exclusive Breastfeeding

Primary audiences: Lactating mothers Secondary/tertiary audience: family members, CRPs and health service providers Existing behaviors – context

- Early breastfeeding and feeding colostrums seemed to be universal in Bhutan, however, the exclusive breastfeeding is disrupted by the cultural tradition of introducing water and butter
- Only 52% of mothers of less than 6 month old reported exclusive breastfeeding (NNS, 2015)
- A major deterrent to exclusive breastfeeding is the workload of the mothers, who often need to go into the fields within six months of birth to continue her farming work
- Though many mothers stayed at home for the first three to four months after the child was born (older women and grandmothers took over much of the care giving after that), not having access to a care facility or crèche close to the workplaces or fields was a major barrier to exclusive breastfeeding for the full six months(World Bank 2014)
- Packaged milk substitutes are considered appropriate and preferred foods for children aged up to 2 as readily available in local markets and take a little time to prepare.
- Some mothers believe that packaged milk make the children fatter (World Bank B2014)

#### **Behavioral determinants**

- Cultural practices of introducing water and butter after 3 months
- Lack of family support and workload of mothers to continue exclusive breastfeeding
- Misperceptions that packaged milk makes the baby healthy/fat
- Substitute or packaged milk is convenient to make

#### **Behavior Change Objectives**

- Increase knowledge and awareness to improve the exclusive breastfeeding practices and discourage the early initiation of water and butter
- Sensitize the family members on the risks and harms of using packaged milk for the baby
- Create supporting environment for mothers at the household level to stay with the baby for the first 6 months to continue exclusive breastfeeding

## Key Messages

- Exclusively breastfeed your child for first 6 months and do not give anything else as breast milk is enough for the baby to fulfill his dietary requirements
- Breastfeeding is very hygienic and prevents diseases
- Giving your baby foods or any kind of liquids other than breast milk, including butter or water before 6 months can damage your baby's stomach
- Breast milk's substitutes such as packaged milk require bottle feeding which can cause diarrhea

## **BCC Activities**

- CRPs will conduct lactating mothers' support group sessions to provide information on the importance of exclusive breastfeeding
- CRPs will sensitize husbands and family members on the importance of exclusive breastfeeding to ensure their support in sharing workload of lactating mothers
- Health Assistants will encourage mothers to only exclusively breastfeeding for first 6 months

#### **Communication Channels**

- Develop radio and TV spots and reinforce messages through radio and TV
- Develop a video of local role models or positive deviants who are exclusively breastfeeding and share their stories and motivations with others
- Celebrate the breastfeeding days to reinforce exclusive breastfeeding messages

## 4.2.2. Priority Behavior 3: Complementary Feeding (Anemia in children <5)

#### Primary audiences: Lactating mothers

## Secondary/tertiary audience: Family members and CRPs

#### **Existing behaviors - context**

- The anemia prevalence among 6-59 months old children is 43% (NNS, 2015)
- Only 11.7% of children are fed with minimum acceptable diet; 16.6% given iron rich food and 15.3% provided with 4 or more food groups (NNS, 2015)
- The qualitative assessment reveals that women seemed to lack knowledge about appropriate feeding practices and which foods high in nutrients are appropriate for children.
- The rural communities use much less diverse diet which is less rich in iron and micronutrients
- Women's workload is also a barrier to good nutrition and care of their children

#### **Behavioral Determinants:**

- Lack of knowledge about local iron-rich foods and food diversity
- Use of traditional carb-based foods
- Work load of women

#### **Behavior Change Objectives**

- Sensitize mothers to increase iron intake of their children through various iron rich foods
- Increase knowledge & awareness about the diversity of locally available fresh vegetables, fruits and foods
- Encourage sustained breastfeeding along-with the complementary feeding for 24 months

#### Key Messages

- After 6 months you must start feeding your baby with semi-solid foods which should include meat, eggs, fruits and vegetables and continue breastfeeding till 2 years
- The complementary diet along-with sustained breastfeeding is important for growth of child
- Every day, feed a variety of locally available fresh vegetables, fruits and foods to your baby to make sure s/he gets all the nutrients to grow well
- Provide iron-rich foods to your children to prevent anemsia
- The complementary diet along-with sustained breastfeeding is important for growth of child

#### **BCC** activities and IEC materials

- An interactive activity' Healthy Food Festival' will be held at the chiwog level to educate the mothers on the locally available fresh vegetables, fruits and diverse food groups
- Cooking sessions will be organized to prepare locally available fresh diverse foods and practice hygiene and active feeding behaviors during the cooking sessions

## **Communication Channels**

- Story-telling to reinforce diverse complementary feeding messages
- Videos will be shown during cooking sessions and support groups to reinforce messages
- Disseminate messages through TV & local and national Radio
- Local rituals such as *Tshechus* should be utilized to disseminate information on complementary feeding

## 4.2.3. Priority Behavior 4: Dietary Diversity/Anemia in Adolescent/Pregnant Women

## Primary Audiences: Adolescents and pregnant women

Secondary/Tertiary Audience: Husbands, family members, CRPs, SHCs, HAs

#### **Existing Behaviors - Context**

- Anemia prevalence in women of reproductive age is 34.9% and pregnant women is 27.3% (NNS15)
- Pregnant women and family members do not understand the importance of first 1000 golden days and the importance of nutritious diet during pregnancy
- Adolescents in school throw away the iron folic acid tablets due to bad taste
- Inadequate dietary habits contribute to poor iron absorption for example decreased absorption has been reported due to drinking tea(Thankachan et al. 2008)
- Vegetarianism is a new trend and school girls are more prone towards vegetarianism
- Some cultural food taboos further limit pregnant women's access to some healthy and locally available fresh fruits for example papaya is considered harmful in pregnancy and avoided (World Bank2014)

#### **Behavioral Determinants**

- Lack of knowledge about dietary diversity
- Lack of understanding of the importance of iron folic acid
- Cultural food taboos
- Social norms (tea after food)

## **Behavior Change Objectives**

- Sensitize the adolescents and pregnant mothers on the risks and consequences of anemia in adolescence and pregnancy
- Increase knowledge &awareness on importance of diverse and iron-rich foods
- Sensitize the adolescents and pregnant women on the importance of taking Iron Folic Acid

#### Key messages

- Pregnant women must eat nutritious foods such as meat, fish, poultry products, beans and a lot of fruits and vegetables to prevent anemia
- Pregnant women must eat regularly at least 4 meals a day
- Always eat iron rich foods such as fresh dark green leafy vegetables to prevent anemia
- Take the iron folic acid (IFA) tablets as prescribed, do not throw it away as it helps you prevent anemia
- Do not take tea with or soon after meal as it affects iron absorption which may cause iron deficiency

#### **BCC Activities**

- Conduct support group sessions with adolescents and pregnant women on the importance of eating locally available iron-rich foods
- Organize the interactive '*Healthy Food Festivals*' to improve their understanding of the diverse and iron-rich foods

#### **Communication Channels**

- Reinforce messages through TV & national Radio
- Organize street theatres in the school to sensitize the students on the diet diversity, importance of Iron Folic Acid

## 4.3. Health Services and Hygiene

The third category of the underlying causes of under nutrition (fig 1) refers to those related to poor public health. This includes factors relating to the health environment, exposure to disease and access to basic health services. Following problems were identified regarding health and hygiene:

## **4.3.1.** Priority Behavior 5: Antenatal Care

Primary target audiences: Pregnant women

Secondary/tertiary audience: Family members, CRPs and health care providers

#### **Existing behaviors – context**

- ANC is usually accessed only after the first trimester or just before delivery
- Only one-fourth (25.9%) received the recommended 8 antenatal checkups (NNS15)
- Many women delay antenatal care, only 51.7% women received ANC during first trimester
- 84.9 percent received at least 4 antenatal check ups
- Based on traditional beliefs, women prefer to keep pregnancy secret for first three months, or they do not know that they are pregnant especially for first time pregnancy
- Domestic workload of the pregnant mothers is one of the reasons for not completing 8 recommended ANC (World Bank 2014)

#### **Behavioral Determinants**

- Lack of knowledge on the importance of ANC
- Traditional beliefs to keep pregnancy secret
- Domestic workload

## **Behavior Change Objectives**

- Increase knowledge & awareness of pregnant women and family members on the importance and benefits of completing 8 recommended ANC check ups
- Engage and motivate family members to share workload and facilitate pregnant women to receive the recommended number of ANC check ups

#### Key Messages

- Antenatal care is very important for the health of the mother and the baby
- ANC visits help you to monitor your health and condition of the baby in the womb
- Screening for HIV and STIs and TT immunization is also done during the visit
- All pregnant women need at least 8 ANC visits to ensure safe delivery
- Feeding the mother well during pregnancy and sharing her workload ensures that the baby grows and develops well even before birth, and is born with a healthy weight
- Pregnant women should take iron folic acid as prescribed by health worker to prevent anemia

#### **BCC Activities**

- CRPs will conduct the support group sessions with pregnant women to sensitize them on importance of ANC and rest during pregnancy
- CRPs organize men's group meeting to sensitize them on the importance of ANC and their supportive role in the pregnancy, birth preparedness and delivery

## **Communication Channels**

- Disseminate key messages on importance of the ANC through video and community radio
- Reinforce key messages through social media i.e WeChat by Chupon and facebook
- Conduct street theatre during the local festivals such as *Tshechus* to highlight the family support for pregnant women

## 4.3.2. Priority Behavior 6: Consumption of Alcohol and Betel Nuts

Primary audiences: Adolescent girls, pregnant womenSecondary/tertiary audience: Parents, husbands, CRPs, SHCs, HAsExisting behaviors (context)

- Alcohol during pregnancy is considered normal and culturally accepted (World Bank 2014)
- An estimated 16% of pregnant women reported consuming alcohol during the week before the survey and 42% consume betel nut (NNS, 2015)
- The qualitative findings also validated that women drink alcohol to relax and remove discomfort (World Bank 2014)
- Bhutan has highest percentage of women in South Asia who consume alcohol (25.5 percent).

• A study in the national hospital in Thimphu confirmed that pregnant women were consuming 10.9 percent in the last week, and 23.7 percent in the last month

## **Behavioral Determinates**

- Lack of knowledge about the harms of alcohol and betel nut during pregnancy
- Cultural norm
- Lack of supportive environment at the household level

## **Behavior Change Objectives**

- The overall behavior change objective is to reduce and eventually stop the alcohol and betel nut consumption among the pregnant women during the pregnancy (Senna et.al., 2009)
- Increase awareness on the dangers of alcohol and betel nut use during pregnancy
- Sensitize family members on their supportive role during pregnancy so the mother does not stress out and resort to alcohol

#### **Key Messages**

- Drinking alcohol when you are pregnant can increase the chance of premature birth, or losing your baby through a miscarriage or stillbirth
- If you are pregnant you should stop drinking during pregnancy to have a safer pregnancy and healthy baby
- Use of betel nut during pregnancy can significantly affect the birth weight of your baby

#### **BCC Activities:**

- The CRPs will organize health education session to sensitize the adolescent girls and pregnant women on the dangers of alcohol and betel nut consumption during pregnancy
- Develop a street theatre to depict the dangers of alcohol drinking and highlight the supportive role of families for pregnant women to not to drink alcohol

## **Communication Channels:**

- Reinforce the messages through community radio, national radio and TV in collaboration with all the key stakeholders
- Identify the role models (positive deviant) mothers who do not drink and share their stories through video to other mothers to motivate them
- Use the local festivals to reinforce the key messages on alcohol during pregnancy

## **4.3.3.** Priority Behavior 7: Adolescent Pregnancies

## Primary target audiences: Adolescents

Secondary/tertiary audience: Family members, CRPs, HAs

## Existing Behaviors – context

- Less than one percent (0.8%) of teenage women (age 15-19) gave birth in the past 12 months(NSB, 2017)
- An estimated 15.71 percent women age 20-24 reported having had a live birth before 18 (NSB, 2011)

• Lack of counseling to the adolescents regarding early age pregnancies and limited access to available family planning methods

#### **Behavioral Determinants**

- Lack of information of the harms of early pregnancies
- Lack of access to the reproductive health counseling or methods i.e. contraceptives

#### **Behavior Change Objectives**

- Increase knowledge and awareness of adolescents on the risks of adolescent pregnancies
- Improve access of adolescents to family planning counseling and services

#### **Key Messages**

- Pregnancy at an early age heightened the risk of negative health and pregnancy outcomes
- Adolescents should receive family planning information and counseling services in order to plan their pregnancies and have safer births
- Adolescent pregnancy increased incidence of poor pregnancy outcomes, such as pre-term deliveries, low birth weight, stunting, and neonatal mortality

#### **BCC Activities**

- CRPs will organize health education sessions to sensitize the adolescents on the risks of early pregnancies for both mother and the newborn
- CRPs and health assistants will provide information to the married adolescents on availability and access of the various family planning (FP) methods to plan their pregnancies

#### **Communication Channels**

- Key messages will be reinforced through community radio and national radio
- Special events or cultural festivals will be utilized to provide messages on birth spacing for the adolescents

## 4.3.4. Priority Behavior 8: Overweight and Obesity Among Adolescents

#### Primary target audiences: Adolescents

Secondary/tertiary audience: Family members, CRPs, SHCs, HAs

#### **Existing Behaviors** – context

- Proportion of Bhutanese overweight children has been increasing for two to three decades: prevalence was 3.5 percent in 1986, 4.4 percent in 2008, and 7.6 percent in 2010 (World Bank 2012).
- 8 % boys and 15% girls aged 13-17 were overweight and 2% were obese in 2016<sup>4</sup>(WHO, 2016)
- Junk foods become the social norm and accessible to children and adolescents

<sup>4</sup> World Health Organization, Regional Office for South-East Asia and Comprehensive School Health Programme, Health Promotion Division, Department of Public Health, Thimphu, Ministry of Health, Royal Government of Bhutan. Report on Bhutan Global School-based Student Health Survey (GSHS) 2016. New Delhi: WHO-SEARO, 2017. O

• Lack of physical activities, prolonged TV watching/playing computer games and frequent consumption of fast food/junk food and frequent consumption of calorie dense foods could be the causes of overweight and obesity.

## **Behavioral Determinants**

- Lack of knowledge on the consequences of obesity and their association with junk food and life style
- Lack of physical activities
- Easy access to junk foods and sugary drinks

#### **Behavior Change Objectives**

- Increase knowledge and awareness of adolescents on the risks of overweight and obesity
- Motivate the children and adolescent to eat fresh local vegetables and fruits

#### Key Messages

- Carrying extra fat leads to serious health consequences such as cardiovascular disease (mainly heart disease and stroke), type 2 diabetes, and some cancers (endometrial, breast and colon).
- Eat healthy foods and maintain healthy wait for good mental health, academic performance and overall wellbeing
- Increase consumption of fruit and vegetables, as well as legumes, whole grains and nuts
- Limit your energy intake from total fats and sugars
- Engage in regular physical activity to at least 30 minutes of regular, moderate-intensity activity on daily basis

#### **BCC Activities**

- CRPs will organize health education sessions to sensitize the adolescents on the risks of being overweight and obese
- Conduct street theatre to sensitize children and adolescents on the consequences of obesity

## **Communication Channels**

- Key messages will be reinforced through community radio and national radio
- Cultural festivals will be utilized to provide messages on the dangers of overweight and obesity and how to prevent them

## 4.3.5. Priority Behavior 9: Hygiene Practices

## Primary audiences: Lactating mothers

## Secondary/tertiary audience: Family members, CRPs, Health Assistants

## **Existing Behaviors – context**

- Diarrheal diseases affect 25% of under-5 children (NSB, 2011)
- Open defecation is still common, especially when community members had to work in the fields all day and had no access to toilets (Atwood et.al., 2014)
- Diarrheal diseases and high parasite load in part of Bhutan is considered as direct or nutritionspecific determinants of under nutrition

- For both pit latrines and open defecation, hand-washing is rarely practiced, primarily because there is no water and soap available (Atwood et.al., 2014)
- Toilet is considered dirty and constructed outside or far away from house where there is no water and soap facility

## **Behavioral Determinants**

- Lack of soap and water facilities to wash hands in the field
- Open defecation still exists as there are no other options available
- Beliefs that latrines are dirty and therefore constructed outside or far from households

## **Behavior Change Objectives**

- Improve the hygiene practices such as hand washing to avoid diarrheal diseases
- Sensitize the community members on using toilets and keeping soaps and water facilities closer to the toilets
- Sensitize mothers on the importance of breastfeeding to prevent diarrheal illness

## Key Messages

- Mothers' should wash their hands with soap and water before food preparation and feeding
- Mothers' should wash their children' hands after they use toilet and before they eat to prevent diarrheal diseases
- Mothers should wash hands with soap and water after using the toilet or washing and cleaning the child's after wash room
- Always use a clean spoon or cup to feed your child to avoid diarrhea and other illnesses
- During illness, increase fluid intake by more frequent breastfeeding and patiently encourage children to eat favourite foods
- After illness, breastfeed and give foods more often than usual and encourage children to eat more food at each sitting
- Continued breastfeeding to 24 months can help prevent diarrheal disease

## **BCC Activities and IEC Materials**

- Posters to reinforce hygiene messages during the meetings
- During cooking sessions, mothers will practice hygiene behaviors i.e. hand washing

## **Communication Channels**

- Community and national radio spots will be developed and broadcast in collaboration with other stakeholders to reinforce messages
- Street theatre will be developed by students to demonstrate good hygiene behaviors at the school and community levels

## 5. Target Audiences and Key Messages

Initially the BCC strategy will be implemented in the selected 24 Gewogs of 5 target Dzongkhags benefiting approximately 10,400 households (52,000 people). However, later, the BCC framework will be adapted for other districts to scale up the BCC interventions. The target audiences can be divided in the following categories:

## 5.1 **Primary Audience**

The primary audience refers to the core group of people around whom the BCC objectives are focused and the primary behavior change is to take place. Adolescents, pregnant women and lactating mothers having children under 2, are the primary audience for the BCC strategy.

## 5.2 Secondary Audience

The secondary audience refers to people who directly relate to the primary audience, have strong influence and may either support or inhibit behavior change in the primary audience. The secondary audience for the BCC strategy is comprised of parents, husbands and family members.

#### 5.3 Tertiary Audience

Tertiary audience refers to people who create enabling environment at the community and health facility level to facilitate the required behavior changes. Community resource persons, teachers, ECCD caregivers, health workers, Agriculture and livestock extension workers, religious persons and community based influential/leaders constitute the tertiary audience for the strategy.

#### 5.4 Key Messages

The BCC efforts will follow the strategic objectives delineated in the National Food and Nutrition Security Strategy, Bhutan. Therefore, the key messages have been developed to improve the identified behaviors in order to achieve the strategic objectives of National Food and Nutrition Security Strategy. The messages will be disseminated to the right target audiences through multipronged communication approach to facilitate behavior changes (see annex 1 for detailed messages).

## 6 Strategic Behaviour Change Communication Interventions

Based on the findings of the literature review and consultative workshops, the BCC strategy will comprise of four main interventions i.e. health communication, community participation, capacity building and inter-sectoral collaboration and advocacy. The health communication refers to the activities that change individual and household behaviors, community participation refers to activities that mobilize and motivate communities to act as 'active partners' in the nutrition interventions, capacity building refers to the training activities of Community Resource Persons or village health volunteers to improve their interpersonal communication and facilitation skills to reinforce the messages. The inter-sectoral collaboration ensures that all sectors work together making the best use of their resources to improve nutrition behaviors at the community level.

#### Figure 2: BCC Strategic Interventions



## 6.1 Health Communication

A multi-pronged behavior change communication approach will be applied to disseminate messages through various culturally appropriate media to ensure the interest and retention of the messages in the target communities. Health communication is the key component of BCC strategy, which utilizes three important mediums i.e. interpersonal communication, folk media and mass media to disseminate nutrition related information.

## 6.1.1 Interpersonal Communication

Interpersonal communication is considered the most effective way of message delivery through local change agents as it provides an opportunity to the audience to ask and clarify questions on the spot. The community resource persons will form the backbone of the interpersonal communication approach. They will be identified and trained in communication and facilitation skills to implement the BCC strategy at the community level. The CRPs or village health volunteers will use both informal and formal methods such as the existing community rituals/festivals and organized sessions respectively to disseminate messages at the community level:

• Capitalize on the existing events, festivals:

The local events, rituals or festivals provide great opportunity to disseminate health and nutrition related information. In Bhutan, there are many festivals and local events such as '*Tshechus*' take place on monthly basis, which could be utilized for health education. The CRPs will make the most of these informal events to share information on food and nutritional behaviors.

• Conduct focused activities:

The benefit of organizing a focused session is that people participate with interest and serious frame of mind to learn. The combination of both formal and informal events increases the effectiveness and reach of the health communication to the target audiences.

The following health communication activities will be carried out in the target areas:

#### 6.1.1.1 Household Visits

As the previous studies suggested that nutrition programs need to ensure that women have access to information and support (Atwood et.al., 2014). The CRPs will identify and register the pregnant women and lactating mothers and conduct counseling sessions at their households on the importance and benefits of ANC, diet during pregnancy, immediate breastfeeding, exclusive breastfeeding, complimentary feeding and hygiene practices. The CRPs will also engage the family members and husbands during the household visits to provide similar information to create a supportive environment for the pregnant and lactating mother at the household level. The CRPs will conduct 2-3household visits per day to provide the individual counseling especially to those who cannot attend the support group sessions.

#### 6.1.1.2 Support Group Sessions with Pregnant Women

The CRPs will conduct support group sessions with pregnant women on the importance and benefits of ANC, diet and rest during pregnancy, delivery preparedness, immediate breastfeeding, colostrums and exclusive breastfeeding. The CRPs will conduct at-least one session with this group in each month.

#### 6.1.1.3 Support Group Sessions with Lactating Mothers

When complementary feeding messages promoting the use of local fresh vegetables and foods are delivered directly to mothers through support groups, significant improvements in complementary feeding practices and dietary intake are possible (Paul et.al., 2010). Providing clear and motivating information about the benefits of modifying feeding behaviors can be sufficient for facilitating adoption of improved practices. Therefore, the CRPs will conduct support group sessions with lactating mothers to provide them information on the importance of immediate breastfeeding and colostrums, exclusive breastfeeding, sustained breastfeeding, diverse complimentary feeding and hygiene behaviors. The CRPs will organize the pregnant women and mothers support groups on monthly basis at the chiwog or gewog level. Based on the opportunity and convenience, the sessions could be combined or conducted separately. At least one support group sessions will be organized with lactating mothers in a month.

#### 6.1.1.4 Health Education Sessions with Men

The family members including husbands will also be engaged in order to sensitize them on nutritional issues and create a supportive environment for the pregnant and lactating mother at the household level. The CRPs will conduct at least one health education session with family members in two months.

#### 6.1.1.5 Healthy Cooking Sessions for Malnourished Children

Only information does not guarantee behavior changes. Mothers need some hands-on experience to learn new behaviors to modify or improve their complementary feeding practices. Therefore, to develop their self-efficacy, cooking sessions will be organized on monthly basis. This will not only provide mothers an opportunity to prepare nutritious foods but also practice hygiene and active feeding behaviors. Healthy cooking sessions will be organized at the chiwog or gewog level.

The CRPs will prepare lists of families of malnourished children <2 years from their concerned chiwogs. Mothers and caretakers of identified malnourished children will be invited to participate in the cooking sessions. In each session, around 10-15 mothers along-with their malnourished children will participate. The CRPs will supervise caretakers preparing and cooking locally identified fresh vegetables or meals, which they will feed to their malnourished children during the session. As the key strategy to provide practice in new, improved feeding habits, caretakers will be required to make a small contribution of the specific local foods. For example, each mother can bring something as per the schedule menu such as handful of rice, oil, fresh vegetables, fruits etc.

The cooking sessions will provide a safe, accepting environment in which mothers can practice new behaviors and *'learn by doing.'* The CRPs can identify the positive deviant mothers (role model mothers) from the community, who despite sharing similar resources have healthy babies. They could be invited to the cooking sessions as resource persons to share their local foods and recipes which enabled them to have healthy babies than their neighbors with whom they share similar resources. The presence of other mothers will provide them with a unique opportunity to socialize, discuss and support each other on nutrition issues.

The cooking sessions will also provide a platform to practice hygiene and active feeding behaviors such as hand washing before meals, hygienic food preparation and active feeding of children. At the end of 8-10monthly sessions, mothers will have internalized the new feeding and caring practices and will continue them naturally at home. These sessions can be combined with the kitchen/community gardening where mothers not only learn about preparation of nutrition foods but also know where and how they can grow or find these fresh green vegetables.

## 6.1.1.6 Healthy Food Festival and Cooking Competitions

The CRPs in collaboration with other stakeholders i.e. MoH and MoAF will organize healthy food festivals on quarterly basis in the selected gewogs. The festivals will be established in the central gewogs arraying small samples of local foods i.e., local fresh vegetables, beans, lentils, rice, fresh fruits, dairy products and meats etc. The activity can also be linked with the community garden program being implemented by MoAF. Pregnant and lactating mothers and family members will be invited to these festivals. First the CRPs and partners will introduce various locally available foods including fresh vegetables, fruits, beans, legumes, rice, dairy products and meats and explain their benefits for children, adolescents and pregnant women. After the interactive discussions, the CRPs and other partners will divide the participants in 3-4 groups and ask them to pick the food of their choice and cook. The CRPs and partners will observe the following behaviors:

- Understanding of the participants about the diversity of foods (food groups)
- Hygiene and hand washing behaviors before cooking and feeding their children
- Active feeding practices to their children

The group who performed all the above mentioned behaviors will be appreciated during the sessions with a round of clap. These festivals will be combined with some activities such as kitchen gardens or community rituals i.e. *Tshechus* where people cook and donate food.

## 6.1.2 Information, Education and Communication Materials

Tailored IEC materials will be developed for the interpersonal interactions. Harmonized and consistent messages will be developed across the materials to ensure the reinforcement of the behaviors. All the materials will be pre-tested in the target communities to ensure their understanding, comprehension, attractiveness and cultural appropriateness of the messages and pictorials. The following materials will be designed for the target communities:

## 6.1.2.1 Flip Chart

A flip chart with complete set of nutritional messages along-with culturally appropriate pictures will be developed for the CRPs to ensure consistent and accurate message delivery to the communities. The CRPs and other volunteers will use it during the support group sessions to actively engage the pregnant and lactating mothers in the discussions.

#### 6.1.2.2 Pamphlet

A pamphlet with key messages on nutrition will be developed and shared with the support groups participants at the end of the session to ensure everyone takes home a clear message. The pamphlet will also generate communication on nutrition at the household level which will pave the way for attitudinal and behavior changes.

#### 6.1.2.3 Posters

A set of posters with key messages (maximum 2 messages per poster) will be designed to be displayed at common social places such as schools, NFE centre's and volunteer's houses to serve as 'cue for action' or reminders for pregnant and lactating mothers to follow the desired behaviors.

#### 6.1.2.4 TV and Radio Spot

TV and radio spots on key messages will be developed and disseminated through TV and radio to reinforce messages.

#### 6.1.2.5 Videos

Animated videos will be developed for the school children to improve their nutrition and hygiene behaviors. Peer-to-peer learning videos as championed by Digital Green<sup>5</sup> will also be developed and complemented with village-level support group meetings and cooking sessions to reinforce messages.

## 6.1.3 Folk or Local Media

The folk or local media is imbedded in the culture and therefore have strong ownership and acceptance in the target communities. The BCC messages will be reinforced through the available local media such community radio, community events and cultural festivals. The CRPs and other partners will capitalize on the existing rituals and festival such as *Tshechus* to reinforce messages. Street theatre is a strong communication tool which educates the communities with entertainment. Street theatres will be developed and performed during the special events and festivals to disseminate messages.

## 6.1.4 Social Media:

The access to mobile phone is very high in Bhutan. About 97% of households have access to mobile phones and on average, a household own 2.3 mobile phones in the country (NSB, 2017). The new social media applications such as WeChat and facebook are very popular in Bhutan. The chupons (community messengers) have already been using WeChat very successfully to disseminate messages to the community members. Social media has been used effectively in various contexts to promote behavior changes among the target communities (Adewuyi and Adefemi, 2016). Therefore, there is a

<sup>5</sup>Digital Green - offer such a means of communication as locally-pertinent videos can then be screened and complemented with village-level discussions, cooking demonstrations, and dissemination of related materials

great potential to build on the existing social media i.e. WeChat to disseminate key messages to pregnant women and lactating mothers to reinforce the ANC and nutrition related behaviors.

## 6.1.5 Mass Media

Mass media, if used wisely and strategically, is very effective to authenticate and validate the messages being delivered by the CRPs at the chiwog or community level. The government of Bhutan also stresses the Bhutanese media to emphasize public service rather than commercialism; therefore, the mass media should be engaged in behavior change communication to disseminate the information to wider audiences (Lhamo and Oyama, 2015). TV spots on the key behaviors i.e. ANC, diet and rest during pregnancy, immediate and exclusive breastfeeding, diversity of the complementary feeding and how to prevent anemia will be developed and broadcast through the national radio and TV. The mass media intervention should be conducted after the community based interventions have been started to validate and reinforce them. The use of mass media will be collaborated with all stakeholders i.e. Health and Agriculture programme to share the cost.

## **6.2 Community Participation**

Community participation is one of the key strategies to create ownership and ensure sustainability of the interventions through active involvement of the communities in the nutrition interventions. The community based activities will be coordinated through other partners such as MoH, MoAF, MoE and civil society organizations working in the area to make the best use of resources, avoid any duplication and prevent community fatigue

## 6.2.1 Revitalization of Community Based Organizations

The community based organizations both formal and informal play an important role in mobilizing communities for health and nutrition. The FSAPP project will be forming 300 farmers' groups which can play an important role in mobilizing communities for nutrition interventions. The farmer groups will be oriented and sensitized on nutrition to ensure their support in the implementation of the nutrition activities at the community level.

## 6.2.2 Sensitization/Advocacy Meeting with key Stakeholders

The CRPs will conduct sensitization meetings with key stakeholders including chairman of Dzongkhags, Gup of gewogs and Tshogpa of chiwogs to get their support in the implementation of the BCC strategy at all levels. Other influential persons, village leaders, religious persons and non-formal educators will also be involved and oriented on nutrition to get their support and buy-in for the community based activities

## 6.2.3 Multisectoral Nutrition Committee

A multispectral nutrition committee will be formed at the chiwog or gewog level to ensure the coordination of food and nutrition activities at the community level. The representatives from key sectors including MoH, MoE, MoAF, FGs and local NGOs will be part of the committee to ensure that all nutrition and agriculture related activities are well coordinated at the community level.

The CRPs will serve as the focal points of the committee. The partners will meet on monthly or bimonthly basis (as feasible) to plan the activities. The CRPs or agriculture worker coordinate their activities to not only talk about nutrition but also how the communities can grow fresh vegetables in their kitchen gardens to get the fresh and nutritious vegetables and foods to eat on sustained basis.

## 6.2.4 Institutionalization of the CRPs

The CRPs needs imbedding in the system for the institutionalization. Therefore, advocacy meetings will be held with the concerned sectors to get their ownership to link these CRPs with the system for monitoring and supervision purposes. In the FSAPP and SAFANSI projects, the CRPs will be supervised by the extension agents. However, in future, they will be linked with the concerned sector for institutionalization. For example, if the CRPs are owned by the Department of Public Health, they will be linked with their concerned Basic Health Unit (BHU) for the supervision and reporting purposes. The CRPs may participate in the routine monthly meetings in their concerned BHU to share the progress on the BCC activities to the Health Assistant.

## 6.3 Capacity Building

Following capacity building activities will be carried out to ensure quality implementation of BCC approach:

## 6.3.1 Training of Trainers (TOT)

A two-day Training of Trainers (TOT) will be organized to build the capacity of the master trainers in BCC strategy, communication and facilitation skills so they could further conduct the cascade training of CRPs and volunteers effectively. The master trainers will be identified from Research Centers, Information, Communication and Technology Division (ICTD), Health Promotion Department and Field Officers from Tarayana Foundation.

#### 6.3.2 Cascade Training

After the TOT, the master trainers will conduct the cascade training of the CRPs on BCC strategy, communication and counseling skills and their roles and responsibilities in the BCC strategy to ensure the effective implementation of the BCC strategy at the Chiwog or community level.

## 6.3.3 Capacity Building Of Service Providers

It is imperative to engage the service providers in order to increase the access to and ensure the quality of services for the community members. The Basic Health Unit (BHU) staff or the health assistants should be trained in the communication and counseling skills to improve their patient-provider interactions, build the trust and rapport to improve the ANC and other services for mothers and children. The HAs should also be trained in growth monitoring and should be equipped with the weighing scales to measure the growth of the children under 5 year of age to monitor and evaluate the impact of the BCC interventions in their concerned areas.

## 6.4 Intersectoral Collaboration and Advocacy

In the Alma Ata Declaration (1978), inter-sectoral action was recognized as a key to improving primary health care, through coordinated action across a range of sectors, including agriculture, education, food and communications.

Nutrition is a cross-cutting issue. The underlying determinants of nutritional status are adequate food, health and care. The goods and services related to these will be available from a range of sectors, which means inter-sectoral coordination is key to addressing malnutrition. Securing high-level political commitment to establish an inter-sectoral initiative on BCC implementation is vital. A successful partnership across sectoral boundaries requires the active participation and goodwill of all partners. The political commitment of partner ministries may be strengthened by formalizing the

partnership in a memorandum of understanding or other framework document that sets out the key responsibilities of each partner/sector on the successful implementation of the BCC strategy.

There is an existent National Nutrition Task Force formed at the national level which meets on need basis to discuss various nutrition related issues such as food fortification. This committee should endorse the BCC strategy and mobilize the key sectors such as education and agriculture to incorporate nutrition messages in their current food and agriculture interventions. As stated in the National Health Promotion Strategic Plan 2015-2023, health promotion plans and activities need mainstreaming into the sectoral programs of the stakeholders (MoH, 2015). The National Nutrition Task Force is the forum to discuss and push this idea through with the concerned ministries.

Community Resource Persons should be the focal point for all sectors for any health education activities on nutrition to ensure consistent messages and avoid any duplication or confusion on the part of communities. Being a multi-sectoral domain, BCC for nutrition is certainly a concern of the following sectors:

## 6.4.1 Ministry of Education (MoE), Department of School Education

Schools are a very strong channel of communication where the students can play an effective role to disseminate information to family members and communities. The existing interventions such as school feeding program, school health program and school agriculture program offer a good entrypoint for the BCC interventions. Therefore, BCC strategy will build on the school-based interventions to incorporate nutrition messages and activities.

Following are the key opportunities to collaborate with schools for effective BCC implementation:

- Incorporate and reinforce nutrition messages in the school feeding program, school agriculture and school health and water and sanitation activities
- Hold quiz competitions on bi-annually basis to create awareness among school children on nutrition and hygiene behaviors
- Conduct intra school speech competitions on nutrition and hygiene and the winner could be nominated as "Nutrition Ambassador". The ambassador will be responsible for identifying students on weekly basis to talk about any aspect of nutrition and hygiene for 2-3 minutes in the school assembly. The school health coordinator (SHC) can facilitate these competitions
- Engage the Non Formal Education (NFE) sector to create awareness on food nutrition and good hygienic practices
- Organize street theatre to highlight the nutrition and hygiene issues during special days
- Display the nutrition IEC materials in the school corridors, school mess and parent-teacher meeting venues to disseminate the information
- Improve awareness of the school mess in-charges on food nutrition to ensure a nutritious diet for the boarder students
- Educate the schools cooks on the hygienic food preparation

## 6.4.2 Ministry of Health (MoH), Department of Public Health

• MoH needs to play an active role in the BCC strategy implementation, both at national andat the community level. MoH can offer their village health volunteers to play the role of CRPs who are by default linked with the health systems.

## 6.4.3 Ministry of Agriculture and Forestry (MoAF)

 MoAF should collaborate with the CRPs to incorporate the nutrition messages in their community related interventions. Agriculture extension staff should be actively engaged in the BCC nutrition activities to ensure concerted efforts to educate communities on both nutrition and agriculture.

#### 6.4.4 Civil Society Organisations

• Civil society organizations including national and international NGOs can play an important role in strengthening coordination and mobilizing resources for the BCC implementation at the chiwog and gewog levels. Their community based forums or structures should be utilized for the awareness raising and cooking activities.

#### 6.4.5 Advocacy

The policy makers and opinion leaders will be engaged to get their support in the BCC strategy implementation. Following activities will be conducted at the national level:

#### 6.4.5.1 Identification of Nutrition Champions

The popular local celebrities such as actors and comedians will be identified as the 'Nutrition Champions' to promote the nutrition cause. They will be mobilized to advocate for the nutrition agenda and reinforce the key nutrition behaviors on TV, radio and videos.

#### 6.4.5.2 Involvement of Religious Leaders

The religious leaders are opinion makers who enjoy great respect and have strong influence on local the communities. The key religious leaders of the areas would be identified and sensitized on the importance of nutrition for adolescents, pregnant women and lactating mothers and will be motivated to reinforce messages in the religious gatherings and sermons to improve nutrition behaviors.

#### 6.4.5.3 Orientation Meetings With Committee of Secretaries and Parliamentarians

Orientation meetings will be held with the committee of secretaries to sensitize them on the nutrition situation and get their support in harnessing their concerned ministries to establish and strengthen the collaboration for the BCC implementation. The committee of secretaries will further sensitize the cabinet ministers on the nutrition who will, in turn, orient the newly elected parliamentarians on the nutrition situation to ensure the smooth implementation of BCC strategy on nutrition.

#### 7 Monitoring and Evaluation

#### 7.1 Monitoring

Monitoring is a continuous process to understand whether our BCC activities are on track and whether the actions being taken by the target communities are leading to the desired behavioral changes. Following monitoring activities will be conducted to ensure the smooth and effective implementation of BCC strategy:

#### 7.1.1 Logistics

Two to three months after the distribution of IEC materials and support group sessions, following observations will be carried out during monitoring visits:

- 1. Whether the materials (posters) are displayed at the appropriate common social places
- 2. Whether the volunteers are using the flip charts and pamphlets correctly
- 3. Whether the community members receive a pamphlet after a support group session
- 4. How is the quality of women support group
- 5. Who is participating in the support group sessions (male/female)
- 6. Whether the timing of the support group sessions is appropriate
- 7. How many times the community radio broadcast happens

These monitoring visits and observations will provide opportunity to assess the quality of BCC implementation and rectify the issues in a timely manner. For example, if community participation in the support group is low, and then change the venue or the timing of support group sessions so that community members could actively participate in these activities.

## 7.1.2 Support Group and Cooking Session Monitoring

Simple monitoring checklists will be developed to assess the quality of support group and cooking sessions. CRPs will use these checklists to document key information such as no. of participants, level of participation, topic discussed, question raised etc. The CRPs will use the monitoring checklists for all the sessions including the cooking and healthy food festivals and submit these forms to the project team during the monthly meetings.

#### 7.1.3 Growth Monitoring

All the malnourished children who were selected for the healthy cooking sessions will participate in the growth monitoring activities on a monthly or bi-monthly (every other month) basis. This will not only monitor the effectiveness of the healthy cooking sessions but also enable the community members to see the benefits or impact of the BCC intervention, which will further motivate them and others to participate in these activities.

#### 7.1.4 Interim Effects:

After 6 months, the team will conduct some Focus Group Discussions (FGDs) and In-depth Interviews (IDIs) with the target communities to find out how the messages and activities are being received by the community. The focus group discussions will help to assess:

- How many people recall health education sessions?
- How many pregnant and lactating women understood the messages correctly?
- Are there any success stories or examples of behavior changes which could be promoted as role model to other community members during support group or cooking?

This stage will help the BCC implementers to improve, change or modify the messages and activities.

#### 7.1.5 Target Behaviors

After one year of BCC intervention, it is important to conduct some focus group discussions with the target audiences to observe some possible behavioral changes (anecdotal). A few gender-balanced focus groups with key target audiences will help to correct, re-orientate or re-design the BCC strategy to ensure the desired outcomes.

## 7.2 Evaluation

A baseline survey has been conducted to establish the benchmark for the nutrition indicators in the target communities. At the end of the project, an end line survey will be carried out to compare the results and asses the outcomes of the behavior change strategy. However, the BCC strategy will also aim to achieve the national targets which are as follows:

## **Table 1: Indicators**

Indicator	Baseline (2015)	Target by 2018	Target by2020
Prevalence of anaemia in Adolescent girls	31.3%		
Anaemia in pregnant women	27.3%	50% reduction	
Anaemia prevalence in women of reproductive age (15-49 years)	34.9%	from 2015 levels	
Anaemia prevalence in children 6-59 months of age	43.8%		
Stunting (chronic malnutrition) prevalence in children under 5 years	21.2%	40% reduction from 2015 levels	
Childhood wasting (acute malnutrition) prevalence in children under 5 years	4.3%	Maintain at less than 4.3%	
Severe acute malnutrition (SAM)	2.6%	<1%	
Exclusive breastfeeding in the first six months	51.4%	More than 50%	
# Annex 1: Key Messages

Table 2: National Food and Nutrition Security Strategy objectives and key BCC messages

Stı	ategic objective 1. To reduce the prevalence of anemia amongst, adolescents, WRA, pregnant and lactating women
-	Always eat iron rich foods such as green leafy vegetables during the pregnancy to prevent anemia
-	Pregnant women must eat regularly – at least 4 meals a day
-	Pregnant women must eat nutritious foods such as meat, fish, poultry products, beans and a lot of fruits and vegetables to prevent anemia
-	Always eat iron rich foods such as dark green leafy vegetables to prevent anemia
-	Take the iron folic acid (IFA) tablets as prescribed, do not throw it away as it help you prevent anemia
-	Do not take tea soon after the meal as it affect the iron absorption which may cause iron deficiency
Sti	ategic objective 2. To improve the nutrition status of pregnant women through quality antenatal cares (ANCs)
-	Antenatal care is very important for the health of your wife and your baby
-	Antenatal visits are very important. It helps you to monitor your health and condition of the baby in the womb
-	Screening for HIV and STIs and TT immunization is also done during the visit
-	All pregnant women need at least 8 ANC visits to ensure safe delivery
-	Feeding the mother well during pregnancy ensures that the baby grows and develops well even before birth, and is born with a healthy weight
-	Pregnant women should take iron folic acid as prescribed by health worker to prevent anemesia
Stı	Pregnant women should take iron folic acid as prescribed by health worker to prevent anemesia ategic objective 3. To promote behavioral change communications for prevention of teenage pregnancies and ohol, doma and tobacco consumption during pregnancy
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Sti Ald - - - - Sti ch	ategic objective 3. To promote behavioral change communications for prevention of teenage pregnancies and ohol, doma and tobacco consumption during pregnancy Pregnancy at an early age increases the risk of negative health outcomes as a result of pregnancy Girls who give birth before the age of 18 miss important educational, social, and economic opportunities Married adolescents need access to family planning information and counseling services in order to plan their pregnancies and have safer births Drinking alcohol when you are pregnant can increase the chance of premature birth or losing your baby through miscarriage or stillbirth. If you are pregnant you should stop drinking during pregnancy to have a safer pregnancy and healthy baby Use of betal nut during pregnancy can significantly affect the birth weight of your baby ategic objective 4. To ensure exclusive breastfeeding and achieve optimal complementary feeding practices in Idren Only exclusively breastfeed your child for first 6 months and do not give water and butter as breast milk is enough for the baby to fulfill his dietary requirements

	ategic objective 5. To ensure exclusive breastfeeding and achieve optimal complementary feeding practices in dren
-	Feed mashed and semi-solid foods beginning at 6 months of age. Foods should be thick enough that it stays on spoon and does not drop off
-	Feed energy-dense combination of soft foods to 6-11 months old including animal-source foods such as meats, eggs, cheese, fish, milk etc.
-	Introduce 'finger foods' that can be eaten by children by themselves from 8 months of age
-	Provide quality time to feed your baby to make sure he/she eats all the food
-	Start the family diet at age of 12 to get the baby used of routine diet
-	Play and sing with the child to encourage him/her to eat
-	Breastfeeding should continue along-with the complementary feeding up to 2 year or beyond
Stra	ategic objective 6. To prevent anemia and other micronutrient deficiencies in children under five
-	Provide iron-rich foods to your children to prevent anemia
-	All children can achieve their full growth potential with good nutrition and care
-	When children receive good nutrition & care, they grow up to be healthier and smarter
-	Every day, feed a variety of locally available foods to your baby to make sure s/he gets all the nutrients to grow well
	ategic objective 7. To improve the nutrition status among sick children (children suffering from infectious and asitic diseases)
-	Wash mothers' and children's' hands with soap and water before food preparation and feeding
-	Mothers should wash hands with soap and water after using toilet or washing and cleaning child's after wash room
-	Always use a clean spoon or cup to feed your child to avoid diarrhea and other illnesses
-	During illness, increase fluid intake by more frequent breastfeeding and encourage children to eat favourite foods
-	After illness, breastfeed & give foods more often than usual and encourage children to eat more food at each sitting
Stra	ategic objective 8. To prevent childhood overweight and obesity
-	Provide plenty of vegetables, fruits and whole-grain products
-	Encourage the positive life style change and motivate them to do some physical activities, games

- Reduce their use of junk foods and sugary drinks which are the main cause of obesity

## **Annex 2: BCC Theoretical Framework**

The BCC strategy employs a combination of behavior change theories and conceptual models including the Socio Ecologic Model, Social Learning Theory (Bandura, 1971) and Steps to Behavior Change to guide the strategic thinking in the design of effective BCC strategy on nutrition. Using a socioecological framework (Costanza, 2014) to understand the complex interplay among individual/family relationship, community and societal factors will provide the context for behaviors change at community and household level. Social Learning Theory of Banduran (Bandura, 1971) posits that people learn from one another, via observation, imitation, and modeling. It also emphasizes on the role of self-efficacy which is required to perform a behavior. The Steps to Behavior Change (Piotrow, et al. 1997) explain the process followed in behavior change, progressing from changes in knowledge, attitudes, and beliefs to intention action, practicing the behavior, and advocacy. It is very important to acknowledge that people are at various points of readiness in regard to any behavior change. The steps to behavior change maintains that behavior change occurs gradually, with the person moving from being uninterested in change (pre-contemplation), to considering change (contemplation), to deciding and preparing to make a change, and then to genuine, determined action (action) to change and to maintain the new behavior (maintenance).

### Figure 3: Steps to Behavior Change



According to the Ecologic model, behavior is influenced by a number of factors, including intrapersonal factors (characteristics of the individual such as knowledge, attitudes, behavior, self-concept and skills); inter-personal processes including formal and informal social networks and social support systems (including the family, peers and friends); community factors (community volunteers and informal networks, influential) and the wider society, including public policies and institutional factors (e.g. government institutions). The Ecologic Model acknowledges the importance of the interplay between the individual and the environment and considers multi-level influences on behavior. In this regard, the individual is considered important but not sufficient in the process of behavior change: many other factors influence behavior and therefore must be addressed at the different spheres of influence.



## Figure 4: Socio-Ecologic Model

The Amalgamation Of These Theories Highlights The Importance Of:

- Family support, household power dynamics and particularly the important roles of key decision makers such as husbands and family members related to ANC, diet during pregnancy, breastfeeding, complementary feeding, health seeking and hygiene
- Understanding the perceptions of target audiences, including nutrition related behaviors, problems, and using this knowledge in the design of BCC messages, materials and activities
- Existing communication mechanisms, interpersonal communication, social networks and folk or local media in facilitating the rapid diffusion and widespread adoption of nutrition behaviors
- Understanding the steps to behavior change allows planners to determine the kinds of messages needed to move people to adopt positive behaviors.
- Self-efficacy of practicing new nutrition behaviors learned from CRPs through support groups or cooking sessions so that they could perform these behaviors on sustainable basis

Problem	Target audience	BCC Objectives	Key messages	Proposed BCC activities	IEC/Channels of	Frequency	Respons
(WHAT)	(WHO)		(How)		communication		ibilities
ACCESS TO	Adolescents,	<ul> <li>Increase</li> </ul>	• 1000 Golden days' period is very important	• Flip charts (job aids) for CRPs will	Develop radio and TV spots	Support groups	CRPs,
FOOD	pregnant women,	knowledge and	which start from the moment a child is	be developed and distributed to		once a month	MoAF,
Behaviour 1:	lactating mothers,	awareness on	conceived in the mother's womb until the baby	ensure consistency of messages	various forms of	(behaviour 1- 9	MoH
knowledge and	parents, family	stunting, its causes	is 2-year-old	on nutrition at the community	malnutrition and their	will be	
awareness of	members, CRPs	and how it can be	• During the 1000 golden days, right nutrition for	level	causes and reinforce	discussed in the	
child		prevented	both mother and baby has great impact on the	<ul> <li>Pamphlets containing short</li> </ul>	positive nutrition behaviors	support groups.	
malnutrition		<ul> <li>Enhance the</li> </ul>	physical growth and intellectual ability of the	messages linking health benefits	on regular basis	In one session	
		understanding and	child	will be developed and shared	Develop videos on nutrition	maximum two	
		importance of 1000	• Diets of poor nutrition quality in pregnancy,	CRPs will conduct nutrition	and share with mothers	behaviors will	
		golden days for	infancy and early childhood causes stunting	support sessions with pregnant	during support groups	be discussed)	
		mother and child	<ul> <li>Provide diverse complementary diet consisting</li> </ul>	women and lactating mothers to	Capitalize on local festivals/		
			of all diet groups to your child to fulfil his/her	sensitize them on stunting and	rituals (Tshechus) to		
			nutritional requirements	malnutrition and what	reinforce nutrition		
			• Every day, feed a variety of locally available	constitute them	messages and behaviors		
			tresh vegetables and toods to your baby to make				
CARING	Lactating mothers	<ul> <li>Increase</li> </ul>	<ul> <li>Exclusively breastfeed your child for first 6</li> </ul>	CRPs will conduct lactating	<ul> <li>Develop radio and TV spots</li> </ul>	Support group	CRPs.
PRACTICES	and family	knowledge and	months and do not give anything else as breast	mothers' support group sessions		with mothers:	VHV, HA,
Behavior 2	members, CRPs,	awareness to	milk is enough for the baby to fulfil his dietary	to provide information on the	through radio and TV	Once a month	
	HAs	improve the	requirements	importance of exclusive	Develop a video of local role		
Exclusive		exclusive	Breastfeeding is very hygienic and prevents	breastfeeding	models or positive deviants	Household visits	
breastfeeding		breastfeeding	diseases	CRPs will sensitize husbands and	who are exclusively	(2-3 visits per	
		practices and	Giving your baby foods or any kind of liquids	family members on the	breastfeeding and share	day per CRP)	
		discourage the	other than breast milk, including butter or water	importance of exclusive	their stories and		
		early initiation of	before 6 months can damage your baby's	breastfeeding to ensure their	motivations with others		
		water and butter	stomach	support in sharing workload of	Celebrate the breastfeeding		
		<ul> <li>Sensitize the family</li> </ul>	Breastmilk's substitutes such as packaged milk	lactating mothers	days to reinforce exclusive		
		members on the	require bottle feeding which can cause	Health Assistants will encourage	breastfeeding messages		
		risks and harms of	diarrhoea	mothers to only exclusively			
		using packaged		breastfeeding for first 6 months			
		milk for the baby					

	(anaemia)	women	pregnant	adolescent and	Diet diversity in	Behaviour 4		PRACTICES	CARING														children)	(anemia<5	y feeding	Complementar	Behaviour 3	PRACTICES	CARING						
								pregnant women	Adolescents and																		members	and family	Lactating mothers						
	•								•							•							•						•						
knowledge &	Increase	pregnancy	adolescence and	anaemia in	consequences of	on the risks and	pregnant mothers	adolescents and	Sensitize the	months	feeding for 24	complementary	along-with the	breastfeeding	sustained	Encourage	fruits and foods	fresh vegetables,	locally available	the diversity of	awareness about	knowledge &	Increase	foods	various iron rich	children through	intake of their	to increase iron	Sensitize mothers	breastfeeding	months to continue	for the first C	stay with the hahy	d love	environment for
prevent anaemia	prescribed, do not throw it away as it helps you	• Take the iron folic acid (IFA) tablets as	green leafy vegetables to prevent anaemia	• Always eat iron rich foods such as fresh dark	meals a day	<ul> <li>Pregnant women must eat regularly – at least 4</li> </ul>	of fruits and vegetables to prevent anaemia	as meat, fish, poultry products, beans and a lot	Pregnant women must eat nutritious foods such							breastfeeding is important for growth of child	• The complementary diet along-with sustained	prevent anaemia	<ul> <li>Provide iron-rich foods to your children to</li> </ul>	well	to make sure s/he gets all the nutrients to grow	fresh vegetables, fruits and foods to your baby	• Every day, feed a variety of locally available	breastfeeding is important for growth of child	• The complementary diet along-with sustained	breastfeeding till 2 years	meat, eggs, fruits and vegetables and continue	with semi-solid foods which should include	• After 6 months you must start feeding your baby						
•	and iron-rich foods	understanding of the diverse	Food Festivals' to improve their	Organize the interactive 'Healthy	foods	eating locally available iron-rich	women on the importance of	with adolescents and pregnant	Conduct support group sessions									cooking sessions	feeding behaviours during the	practice hygiene and active	available fresh diverse foods and	organized to prepare locally	Cooking sessions will be	diverse food groups	fresh vegetables, fruits and	mothers on the locally available	Chiwog level to educate the	Food Festival' will be held at the	An interactive activity 'Healthy						
			Folic Acid	diversity, importance of Iron	students on the diet	the school to sensitize the	Organize street theatres in	TV & national Radio	<ul> <li>Reinforce messages through</li> </ul>							on complementary feeding	to disseminate information	Tshechus should be utilized	<ul> <li>Local rituals such as</li> </ul>	national Radio	through TV & local and	Disseminate messages	messages	support groups to reinforce	cooking sessions and	Videos will be shown during	feeding messages	diverse complementary	Story telling to reinforce						
	Once a month	support group:	Conduct		gewog level	quarterly at	Festival:	Healthy Food	Organize																		once a month	with mothers:	Cooking session						
						gup,	Tshogpa,	VHV,	CRPs,																		MoAF	VHVs,	CRPs,						

	their starios through wides	drinking and highlight the	significantly affect the birth weight of your baby	pregnant women		
	who do not drink and share	depict the dangers of alcohol	<ul> <li>Use of betel nut during pregnancy can</li> </ul>	among the		Alcohol and
	(positive deviant) mothers	<ul> <li>Develop a street theatre to</li> </ul>	healthy baby	nut consumption		Consumption of
	<ul> <li>Identify the role models</li> </ul>	consumption during pregnancy	during pregnancy to have a safer pregnancy and	alcohol and betel		
	key stakeholders	of alcohol and betel nut	• If you are pregnant you should stop drinking	eventually stop the		Behavior 6
month	collaboration with all the	pregnant women on the dangers	stillbirth	reduce and		
women: once a	national radio and TV in	the adolescent girls and	losing your baby through a miscarriage or	objective is to	CRPs, SHCs, Has	HYGIENE
with pregnant	through community radio,	education session to sensitize	increase the chance of premature birth, or	behaviour change	family members,	SERVICES AND
Support groups	<ul> <li>Reinforce the messages</li> </ul>	<ul> <li>The CRPs will organize health</li> </ul>	• Drinking alcohol when you are pregnant can	The overall	Pregnant women,	HEALTH
				check ups		
				number of ANC		
				the recommended		
				women to receive		
				facilitate pregnant		
				workload and		
			prescribed by health worker to prevent anaemia	to s		
	for pregnant women		<ul> <li>Pregnant women should take iron folic acid as</li> </ul>			
	highlight the family support		with a healthy weight	Engage and	•	
	rituals such as isnechus to		and develops well even before birth, and is born	ν		
	during the local restivals or	pregliality, plitti preparedness	share her workload ensures that the baby grows			
	Conduct street theatre	supportive role in the	<ul> <li>Feeding the mother well during pregnancy and</li> </ul>	s Bunandrador vic		
	TACEDOOK		ensure sate delivery			
	we.cnat by chupon and	meeting to sensitize them on the	<ul> <li>All pregnant women need at least 8 ANC visits to</li> </ul>	nce a		
-			וא שואט מטווה ממוווא נווה אואנ	2		Antonatal Cara
month		organize	is also done during the visit	nhers o		
One session per	Reinforce key messages	during pregnancy	<ul> <li>Screening for HIV and STIc and TT immunization</li> </ul>			
	community radio	importance of ANC and rest	condition of the baby in the womb	pregnant women		<b>Behavior 5</b>
women	through video and	women to sensitize them on	ANC visits helps you to monitor your health and	awareness of	members, CRPs	HYGIENE
with pregnant	on importance of the ANC	group sessions with pregnant	of the mother and the baby	knowledge &	and family	SERVICES AND
Support groups	• Disseminate key messages	CRPs will conduct the support	• Antenatal care is very important for the health	Increase	Pregnant women •	HEALTH
				Acid		
				of taking Iron Folic		
				on the importance		
				pregnant women		
				adolescents and		
				Sensitize	•	
				rich foods		
				diverse and iron-		
and adolescents			absorption which may cause iron deficiency	importance of		
WITH			<ul> <li>הס ווסר ומגב ובמ שסטו מונבי חובמו משור מוובכנש ווסוו</li> </ul>			

	-	obesity	Overweight and		<b>Behavior 8</b>		HYGIENE	SERVICES AND	HEALTH					pregnancies	Adolescent		Behavior 7		HYGIENE	SERVICES AND	HEALTH													pregnancy	betel nut during
						CRPs	members, St	parents,	Adolescents,											and boys	Adolescent g														
			•				SHCs,	family	•												girls •							•					_		
fresh local vegetables and fruits	ent to	children and	Motivate the	and obesity	risks of overweight	adolescents on the	awareness of	knowledge and	Increase	services	counselling and	family planning	adolescents to	married	Improve access of	pregnancies	risks of adolescent	adolescents on the	awareness of	knowledge and	Increase the	resort to alcohol	not stress out and	so the mother does	during pregnancy	supportive role	members on their	Sensitize family	pregnancy	nut use during	alcohol and betel	on the dangers of	Increase awareness	pregnancy	during the
•		•		•					•						•				•		•														•
Engage in regular physical activity - to at least 30 minutes of regular, moderate-intensity activity on daily basis	sugars	Limit your energy intake from total fats and	well as legumes, whole grains and nuts	Increase consumption of fruit and vegetables, as	breast and colon).	diabetes, and some cancers (endometrial,	(mainly heart disease and stroke), type 2	consequences such as cardiovascular disease	Carrying extra fat leads to serious health			neonatal mortality	deliveries, low birth weight, stunting, and	poor pregnancy outcomes, such as pre-term	Adolescent pregnancy increased incidence of	births	order to plan their pregnancies and have safer	planning information and counselling services in	Married adolescents should receive family	negative health and pregnancy outcomes	Pregnancy at an early age heightened the risk of														
		consequences of obesity	adolescents on the	sensitize children and	• Conduct street theatre to	being overweight and obese	the adolescents on the risks of	education sessions to sanitize	• CRPs will organize health	pregnancies	methods to plan their	various family planning (FP)	availability and access of the	married adolescents on	provide information to the	<ul> <li>CRPs and health assistants will</li> </ul>	mother and the newborn	early pregnancies for both	the adolescents on the risks of	education sessions to sensitize	• CRPs will organize health												alcohol	pregnant women to not to drink	supportive role of families for
	how to prevent them	overweight and obesity and	on the dangers of	utilized to provide messages	Cultural festivals will be	national radio	community radio and	reinforced through	Key messages will be				adolescent	spacing for the married	provide messages on birth	festivals will be utilized to	• Special events or cultural	national radio	community radio and	reinforced through	Key messages will be													motivate them	to other mothers to
						once a month	adolescents:	with	Support groups									once a month	adolescents:	with	Support groups														
						gup	Tshogpa,	VHV,	CRPs,									dnB	Tshogpa,	VHV,	CRPs,														

									practices	Hygiene		Behavior 9			HYGIENE	SERVICES AND	HEALTH
															CRPs, SHCs, HAs	family members,	Lactating mothers,
					•							•					•
illness	during the child	breastfeeding	of continued	on the importance	Sensitize mothers	the toilets	facilities closer to	soaps and water	toilets and keeping	members on using	community	Sensitize the	diarrheal diseases	washing to avoid	such as hand	hygiene practices	Improve the
				•			•		•			•			•		•
		more food at each sitting	often than usual and encourage children to eat	After illness, breastfeed and give foods more	children to eat favourite foods	frequent breastfeeding and patiently encourage	During illness, increase fluid intake by more	child to avoid diarrhoea and other illnesses	Always use a clean spoon or cup to feed your	cleaning the child's after wash room	water after using the toilet or washing and	Mothers should wash hands with soap and	prevent diarrheal diseases	after they use toilet and before they eat to	Mothers' should wash their children' hands	water before food preparation and feeding	Mothers' should wash their hands with soap and
															•		•
													behaviour i.e. hand washing	mothers will practice hygiene	During cooking sessions,	messages during the meetings	Posters to reinforce hygiene
											•						
							and community levels	behaviours at the school	demonstrate good hygiene	developed by students to	Street theatre will be	messages	stakeholders to reinforce	collaboration with other	developed and broadcast in	radio spots will be	<ul> <li>Community and national Support groups CRPs,</li> </ul>
														month	mothers: once a Tshogpa,	with lactating HAs,	Support groups
														gup	Tshogpa,	HAs,	CRPs,

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