REPORT
on
Gap Analysis of Food and Nutrition Security of Chittagong Hill Tracts

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Report on Gap Analysis of Food and Nutrition Security of Chittagong Hill Tracts, Bangladesh

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Perspective and the findings represent the personal views of the study respondents and do not necessarily reflect the position of the MJF.

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Nazme Sabina

Content

Abbreviations

ANC	Ante Natal Care
BADC	Bangladesh Agriculture Development Corporation
BBS	Bangladesh Bureau of Statistics
BARD	Bangladesh Rural Development Board
BBF	Bangladesh Breastfeeding Foundation
BDHS	Bangladesh Demographic and Health Survey
BNF	Bangladesh Neonatal Forum
CBO	Community based Organization
CC	Community Clinic
CED	Chronic Energy Deficiency
CHT	Chittagong Hill Tracts
CHTDF	Chittagong Hill District Development Facility
DAE	Directorate of Agriculture Extension
DH	District Hospital
DoF	Department of Fisheries
DoL	Department of Livestock
EU	European Union
FAO	Food and Agricultural Organization
FGD	Focus Group Discussion
FNS	Food and Nutrition Security
FWC	Family Welfare Centre
GSK	Gram Shurokha Komity
HDC	Hill District Council
HFIAS	Household Food Insecurity Assessment Survey
HH	Household
IGA	Income Generating Activities
IYCF	Infant and Young Child Feeding
KII	Key Informant Interview
LGI	Local Government Institutions
MJF	ManusherJonno Foundation
MoCHTA	Ministry of Chittagong Hill Tracts Affairs
MOWCA	Ministry of Women and Children Affairs
NGO	Non-governmental Organization
RB	Rice Bank
RC	Regional Council
SSNP	Social Safety Net Programme
SUN	Scaling Up Nutrition
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
WASH	Water, Sanitation, and Hygiene
WFP	World Food Programme
WHO	World Health Organization

Chapter 1: Background

1.1 The Place

The Chittagong Hill Tract (CHT), an area of 13,184 square kilometers, is about one-tenth of the total area of Bangladesh with a population of over 1.3 million. It is the southeastern part of Bangladesh and it adjoins Arakan and Chin States of Myanmar, and Tripura and Mizoram States of India. Until 1984, the CHT was a single district of Bangladesh. In that year, it was divided into three separate districts: Khagrachari, Rangamati, and Bandarban[1]. The region is geographically distinct from the plains, made up of very steep, rugged hilly terrain and in many places, dense bamboo jungle. The rough terrain, remoteness of villages and various political issues associated with a protracted conflict have seriously impeded the economic development of the region. From an economic and strategic point of view CHT is important for national policy makers. It is adjacent to the two Indian states Tripura on the north and Mizoram on the east and by Myanmar on the south and east.

The CHT has a dual governance system. Alongside general state administration, there is the traditional governance system. Until the CHT was annexed by the British in 1860, the CHT was independent and ruled by the traditional Rajas. This traditional governance system exists until now, with traditional leaders playing a vital role in natural resource management and social justice, and in maintaining peace and social harmony in the CHT. The CHT is divided into three 'Circles' headed by Rajas (Kings). Each Circle is comprised of Mouzas headed by a Headman, and each Mouza is composed of villages with a village Chief or Karbari. The districts are post conflict areas that have been disadvantaged and isolated in the past decades. The stability 'restored' with the signing of the CHT Peace Accord in late 1997.

1.2 People, Life and Livelihoods[2]

Out of total population, 35-40 per cent lives in municipalities and small towns, 35-40 per cent occupies sedentary valley farms, and 20-30 per cent is living in the hills, occupied in semi-sedentary shifting cultivation. The indigenous communities are collectively known as *Jumma*, meaning 'hill people who practice *jhum*'. Traditionally, indigenous peoples are dependent upon swidden agriculture locally known as *jhum*cultivation which is a local form of "shifting" or "rational" slash and burn type of cultivation.

Over the last 30 years, non-indigenous Bangalee settlers from other parts of Bangladesh have been allocated land in the CHT districts and now represent approximately 50 percent of the CHT population. The indigenous inhabitants of CHTare: Bawn, Chak, Chakma, Khyang, Khumi, Lushai, Marma, Mro, Pankhoa, Tanchangya, and Tripura.It is expected that the greater number of smaller communities are living in the high hills.Their appearance, languages, and cultural traditions are significantly distinct from the Bengali speaking majority population of Bangladesh. Some of them have their own language in both oral and written form, although many of the scripts are under threat. About one-fourth of the total CHT land is occupied by reserve forests, which restricts cultivation and extraction by indigenous people. Indigenous people are permitted to use the rest of the land recognized as Unclassified State Forest (USF) in addition to the 'District Forest' under the discretion of the administration.

The economy of the CHT is heavily dependent on agriculture, but because of the steep and rugged slopes, agriculture production is extremely difficult. Local varieties constitute roughly 70 percent of seeds sown under *Jhum* cultivation and allow the cultivators to spread out harvests to smooth out

[1]The districts are known as Chengmi (Khagrachari), Gongkabor (Rangamati) and Arvumi (Bandarban).

[2] This section draws on UNDP 2009, Save the Children UK 2009,SANDEE 2006

consumption as well as labor requirements. To indigenous people, *jhum*is more than a farming method: it is a source of knowledge, inspiration, and a tangible expression of their struggle to protect their distinct culture and identity.

Jhum is a form of subsistence farming although some other cash crops are produced and sold in small quantities. The period of *Jhum* seedling is completed by mid-May – which had been the norm in the past. During recent years, this goes until end May or beyond. Out of an estimated 364,000 acres of available cultivable land, 27 percent is used for *jhum*, 20 percent is for plough cultivation, 18 percent is used for homesteads and 35 percent is used for plantation or left to follow. Major sources of food are own crop production (rice, maize, vegetables, spices, potato, etc.), livestock products (meat, milk, eggs from own livestock/poultry), fish (fish caught and consumed), market purchases (all foodstuffs purchased from open market), leaves/tubers/roots from forest. There are large variations of sources of livelihoods supports across the hill districts (Annex table 2). Such variations arise from (i) land productivity, which tend to diminish with decline in fallow period (ii) and with increase in distance from water sources; (iii) distribution of user right (for *Jhum* cultivation) over land; (iv) number of able-bodied persons in the family; (v) proximity to market places for work as opposed to proximity to high-valued timber and other forest products; (vi) proximity to streams for fishing, etc. A dependency on shifting cultivation for income, combined with shrinking land availability, puts traditional livelihoods of the indigenous people under serious threat.

Sources of Livelihoods in a Normal Year

Sources of Food
- *Own Crop Production (rice, maize, vegetables, spices, potato, etc.)*
- *Livestock Products (meat, milk, eggs from own livestock/poultry)*
- *Fish (fish caught and consumed)*
- *Market Purchases (all foodstuffs purchased from open market)*
- *Leaves/tubers/roots from forest.*

Sources of Income
- *Crop Sales (paddy and vegetable other crops)*
- *Livestock Sales (sale of pigs, cows, buffaloes)*
- *Livestock Product Sales (meat, fish and eggs)*
- *Sale of fuel woods*
- *Labor (house repairs of others, work in others' Jhum land, tobacco fields and for drying tobacco leaves, labor for seedling timber, limited work in market places if these are in close proximity)*

Sources of other supports to Livelihood/coping mechanisms
- *Loans in kind and cash*[3]
- *Safety net programs (female stipend, rice, salt, nappi, etc.)*
- *Other Relief*
- *Sale of assets*

More than half (55 percent) of average household income (including transfers received) originates from crop sector – with *Jhum* accounting for more than half of it; 8 percent from wage/labor is equally contributed by agriculture and non-agriculture labour; 10 percent from petty trade and salaried jobs; 7 percent from female stipends and social security programmes; and more than 9 percent from selling forest produce that includes bamboos. There are also supply constraints, financial limitations or poor access to markets. As a result, the majority of the households in the CHT live in chronic poverty while extremely high rates of unemployment, illiteracy and an overall lack of economic opportunities are prevalent. Around 65 percent of the population is poor (A table on poor and non-poor is in Annex3).

[3]Almost one-third of households in the CHT had taken a loan for food in the previous month (UNDP, 2009), more than double the percentage in rural Bangladesh, which suggests that household food insecurity was more common in the region

The worst period in terms of food security[4] is from mid-June to mid-August. The CHT region of Bangladesh had experienced a unique phenomenon of bamboo flowering in 2007 which increased the rodent outbreaks[5] caused food insecurity of the local people. Evidence on rat infestation[6] has generally been indirect. The initial UNDP assessment identified only seven upazilas as affected; Baghaichhari, Barkal, Juraichhari, Belaichhari of Rangamati district and Rowangchhari, Ruma and Thanchi of Banderban district.Others reported of 45 villages in eight upazilas. Of these, 15 villages were in Dighinala, 10 in Laxmichhari, 5 in Matiranga, 10 in Mohalchhari and five in remote Panchhariupazila. The rodent attacks were not confined to *jhum* cultivation only rather to the plain lands as well.

While the relatively richer households had to face a greater loss, the adverse effects were more on education of their children, healthcare, business, etc. The poor households, in addition to crop loss, were severely affected because of reduced employment arising from reduced areas under *Jhum*cultivation, and drastic loss in bamboo forest whose harvesting will no more be there for several years. The reduced demand for labor also led to almost 40 percent reduction in daily wage rates in some of the eastern hilly areas. For all households in the area, as well as in the neighboring regions, quality of housing was adversely affected due to nonavailability of Muli bamboos and price increase. Heavy rain restricted mobility and bamboo harvesting was not feasible. Most bamboos felled during the dry season reached the river routes by June. Thus there was very insignificant work available on that count. During that period, fish was not readily available[7]. Most assertions based on past experience suggested that it normally takes around four years to get back to normalcy – that is, some kind of ecological balance[8].

There are animals other than rodents, which regularly damage crops, such as, wild boars, parrots, squirrels, monkeys and wild fowls (*Bon Morog*). While recent incidents of damages caused by monkeys, wild boarsand some of the other animals were reported, none considered this as gross deviation from those observed in normal years. There are however strong apprehensions that 'rat floods' precede a second set of offenders –which will prolong the misery for local people, particularly the *Jhum* cultivators. The food insecurity also occurred from low priceof cash crops[9], conflict[10], etc.

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[4] In local terms, food insecured time is called 'bhadraat'.

[5] Within a week of pollination, the flowering led to fruit setting, provided an abundant and nutritious supply of food for rodents. Subsequently there was a remarkable increase in breeding frequency among certain rodent population, which they gave birth up *to eight times during the period of food abundance. The rodents demolished the bamboo crop and moved on to feed off agriculture crops in fields.*

[6] *Rodents are major agricultural, urban and social pests across much of the developed and developing world. In Asia alone, the amount of grain eaten by rodents in rice fields each year would provide enough to feed 200 million Asians for a year, with rice providing 50–60 percent of their daily calorific intake.*

[7] *Fishing is restricted in some areas for a period of three months beginning mid-May every year.*

[8] *However, past experience, which was fifty years back, was in an ecological setting where there were fewer human habitats near the bamboo forests, and plague was a major cause of depletion of rodent population. Currently, while the size of bamboo forest has depleted, sustenance of large rodent population over a longer period (beyond four years) is very likely since possibility of encroachment into human habitat in search of food is high.*

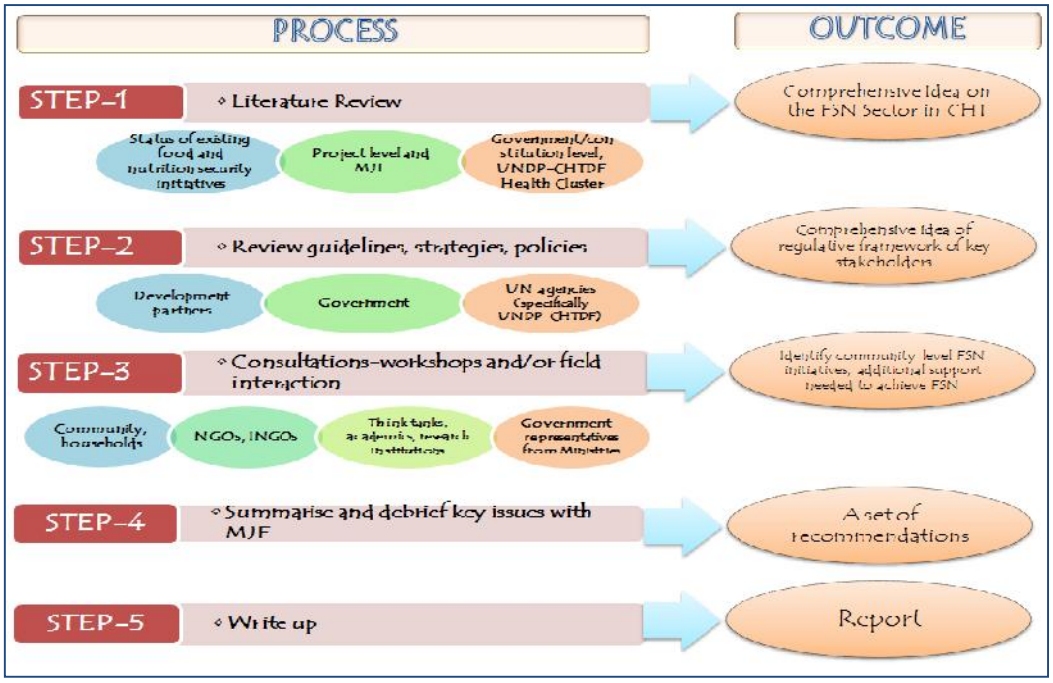
[9] *There was a bumper production of turmeric in 2010 and the farmers produced (there was also a cash incentive scheme from Bangladesh Bank to produce turmeric) turmeric instead of paddy in the subsequent year. The government did not have a mechanism to procure large amount of the turmeric produced. As a result, there was a fall in price of the turmeric and farmers' life became jeopardized. Moreover the recent findings of Food and Drug administration of USA (presence of lead in more than acceptable limit in the Turmeric powder of an agro-processing industry and main source of their raw turmeric comes from the CHT) may limit the market of other agriculture products both in home and abroad.*

[10] *In the post-cold war era, and after the restoration of democracy in Bangladesh, pressure for a political solution mounted. This led to an accord between the PCJSS and the Government of Bangladesh on December 02, 1997, which has come to be known as "The Chittagong Hill Tracts Accord 1997". The Accord was incomplete; the 'United Peoples Democratic Front (UPDF)' continues the struggle for full autonomy (Mohsin 2003). Continuing land disputes, the non-restitution of land to indigenous peoples, the nonwithdrawal of the Bangladesh army, the poor rehabilitation of refugees and internally displaced persons (IDP) along with opposition to the Peace Accord make the postconflict situation of CHT fragile. Indigenous people living in this area continue experiencing various types of violence, mistreatment and mistrust from settlers who have not been re-settled in other parts of Bangladesh. These are manifested through various types of low intensity violence like arson, abduction, extortion, harassment of women and children and restricted mobility (Barkat et al. 2009). Interestingly most of these incidents happen either on planting or in harvesting season. These conflicts have an impact on livelihoods and food security of the people. (http://www.microconflict.eu/publications/RWP39_MB_JC_MM.pdf)*

The region lags behind of nutrition, health, education, water, sanitation, and hygiene, indicators compared to other parts of the country.

Chapter 2: Methodology

According to the ToR[11], the gap analysis of food and nutrition security in CHT followed several procedures such as: i) Undertook an overview of existing food and nutrition security initiatives in CHT; ii) Provided clear indication of community level initiatives that need to be strengthened and scaled up in CHT; iii) Identified areas where additional support needs to be given to achieve food and nutrition security. The analysis is based on the methodology shown below:



STEP 1

Review of literature - three levels to get a comprehensive idea of the sector

1) Status of food security and nutrition in Chittagong Hill Tracts (CHT) - review of all literature - what are the key barriers, challenges, etc.
2) At the project level (Capacity building and CHT program) and the MJF - their vision, mission, strategies, why they are interested food security and nutrition, their target group, history, etc.
3) At the government/ constitution/CHTDF-UNDP Health Cluster level - given the target group - what are their rights, what is existing process, approaches, programmes of reaching them, what levels, etc.

Outcome was deeper understanding of the FSN in CHT.

[11] The Terms of Reference of the assignment is annexed

STEP 2

Review the guidelines, strategies and policies (for example, Tribal Health Plan, Maternal Health Strategy, Neonatal Health Strategy, PRSP, etc) of the government, development partners and UN agencies (specifically CHTDF-UNDP)

Outcome was developing deeper understanding on strategies and approaches of key stakeholders

STEP 3

Consultations at three levels - this will be through small workshop, stakeholder analysis and/or field interactions

a) at the community level - existing local food and nutritional Knowledge Attitude and Practices (KAP) among children under five, pregnant and lactating women (children of under two years of age)
b) at the facilitators levels – UN agencies, NGOs, INGOs, think-tanks, and others
c) at the government level (representatives from the Ministry of Health and Family Welfare, Ministry of Chittagong Hill Tracts Affairs, Ministry of Food, Ministry of Disaster Management and Relief, Ministry of Women and Children's Affairs, etc)

Outcomes were: i) understanding the given context in detail, with socio-economic and demographic understanding of people; ii) identifying community level initiatives that need to be strengthened and scaled up in CHT; iii) identifying additional support needs to be given to achieve food and nutrition security. A half-day stakeholder consultation was arranged in Banderban. The participants were: representatives from MOHFW, Hill District Council, Ministry of Food, Ministry of Disaster and Relief, Ministry of Agriculture (Agriculture Extension Officer), Civil surgeon, NGOs working on health, livelihoods, representative from Caritas, etc.

STEP 4

Summarise and debrief

Outcome was: i) Set of recommendations to develop customized messages for stakeholders – communities, network staff and grassroots organizations

STEP 6

Write up.

Outcome was: i) final localized study and gap analysis which includes drafting from the consultant, feedback from MJF and finalizing the draft project document.

Based on the literature and document review and initial stakeholder consultation, a number of factors have been identified to contribute to the gap in attaining food and nutrition security (FNS) of CHT, of them, there are both demand and supply side factors. There is an attempt to score each factor ranging 1-3 where 1 (one) shows contributing to insignificant gap in FNS, 2 (two) shows moderate contribution and 3 (three) shows large gap. The score is not necessarily confined into integer, however, the score also becomes fraction when the factors have indicators tend to attain both lower and upper score. In that case, the score of the factor is determined by considering the comparative weight of indicators of

the specific factor. The score analysis has been based on document and literature review, stakeholder consultation, observation, primary data collection.

Chapter 3: Findings

The findings consist of analysis of supply and demand side factors affecting food and nutrition security in Chittagong Hill Tracts. The supply side factors consists of policies, services, interventions, etc exist for attaining FNS in the region and demand side factors include the factors which occur from the community. The score of each factor is also determined based on the analysis.

3.1Supply side factors:

3.1.1 Policy and institutional coherence: Although the 6th Five-Year Plan (FYP) (2011-15) holds that 'strong agriculture remains fundamental to poverty reduction as well as food security.' The diversity in crop production, livestock, fisheries, traditional seed preservation, dietary diversity and practice, health seeking behavior, food consumption pattern, disaster (e.g. rodent attack, wild boar attack, etc) of CHT is not captured in key policy documents, such as in the National Seed Policy, Flood Action Plan, National Agricultural Extension Policy, National Water Policy (1999), Food and Nutrition Policy (1997), National Plan of Action for Nutrition (1997), the Livestock Sector Road Map (2006), the Fisheries Sector Road Map (2006), and the National Disaster Management Plan (2007-2015). This implies that at the Policy Level, key food security and nutrition issues of CHT are not well addressed.

The issues related to CHT are discussed[12] only in LCG (Local Consultative Group)[13] for CHT. There are LCG on Agriculture, Food Security, and Rural Development, Health, Nutrition, and Population. It needs for indepth analysis whether food security and nutrition of CHT should be taken into account only in CHT or across other LCGs.

SCORE: 1.5

3.1.2 Information collection: There is a lack of information on the current health and nutrition situation in the CHT and on the overall impact of recent development activities on health and nutrition in the region. This is partly due to the challenges of data collection in the CHT - the difficult terrain, the isolated location of many communities, the language barrier and the pockets of insecurity. National surveys conducted by the Government of Bangladesh are usually designed to produce statistically representative data for divisions and the country and **not for the CHT** region, such as, Bangladesh

[12] The key issues addressed in different LCGs meeting of CHT were the lack of funding of the HDCs, dissemination of new and appropriate technology to achieve agricultural development, need for in situ conservation sites for genetic resources, etc. Need for increased coordination in the management of Kaptai Lake and continued collaboration between FAO and UNDP and all development partners.

[13]There are three coordination mechanisms between Government of Bangladesh and Development Partners- the Local Consultative Group (LCG) Plenary, the Aid Effectiveness Unit (AEU) in Economic Relations Division (ERD), Ministry of Finance, and the LCG Working Groups. The objective of the LCG Plenary is to ensure effective and efficient use of external aid in line with the GoB's Sixth Five Year Plan [National Development Strategy] and aligned to the Principles of the Paris Declaration (PD), Accra Agenda for Action (AAA) on aid effectiveness and Busan Partnership for Effective Development Cooperation (2011). LCG Plenary meets as and when needed, usually initiated by donors, to review progress on development issues. More on LCG at: www.lcgbangladesh.org

Demographic and Health Survey (BDHS)[14]. This is a nationwide sample survey, being conducted in every five years, of men and women of reproductive age.

The survey is usually designed to provide information on fertility and childhood mortality levels; fertility preferences; use of family planning methods; maternal, child and newborn health, including **breastfeeding practices, nutrition levels including anemia and presence of iodine in cooking salt;** knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STI); and community-level data on accessibility and availability of health and family planning services which are missed out in every period. Helen Keller International and some development organizations conduct data collection; however these activities tend to be localized within their operational areas and are designed to meet their objectives for project design, monitoring and evaluation. WFP prepared a map showing relative food insecurity in all unions of three districts[15] and recently they conducted a food security and nutrition assessment of CHT[16]. Since 2003, HKI monitors health and nutrition in this region every two months and to compare progress with the rest of the country. There is a need to conduct a regular representative sample survey (or surveillance) on food security, nutritional status of mother, adolescent girls, and children, maternal and child health and related issues. As geographical and administrative structure of CHT is different than that of other parts of the country, the sample design may be different which results in higher cost for the survey. These issues should be taken into account when one organization commits for providing regular update on food security and nutrition. This information should also be accessible to the agencies interested to work in CHT.

SCORE: 1.5

3.1.3 Health and Nutrition services: The Government of Bangladesh has replaced the separately managed National Nutrition Programme (NNP), with the National Nutrition Services (NNS) in an effort to mainstream nutrition as part of the Health, Population and Nutrition Sector Development Programme (2011-16). Implementation of direct nutrition interventions is planned to be guided by NNS Operational Plan[17]. Other stakeholders are also implementing and supporting smaller-scale interventions related to direct nutrition inputs, such as, National Infant and Young Child Feeding (IYCF) Strategy and Action Plan by Alive and Thrive. The NNS implementation **strategy** is designed[18] in line with **mainland realities and not much attention** given on **ethnic communities' food intake**, practice, and perception. In addition, it is mentioned in the Tribal Health Plan of the government that '*Ethnic group specific information will be used to develop culturally sensitive IEC materials for both public and private providers*' which is yet to materialized in CHT. The government health service delivery mechanism is different in CHT than in other parts of the country[19]. These observations are important to take into account as the programme also aims to achieve the reduction in the prevalence of Vitamin A

[14]The Bangladesh Demographic and Health Survey (BDHS) is part of the worldwide Demographic and HealthSurveys programme (MEASURE DHS). In Bangladesh, Research Unit of NIPORT and Mitra and Associates are involved in collecting and analyzing the information. USAID, Bangladesh provides financial support for the survey. Information and report about the BDHS will be available on http://www.measuredhs.com and http://www.niport.gov.bd

[15]www.refworld.org/docid/4821c8ffd.html

[16] Food Security and Nutrition Assessment in Chittagong Hill Tracts, World Food Programme. 2013

[17]NNS has targeted the top recommended interventions for implementation, including promotion of exclusive breastfeeding for 6 months and continued breastfeeding up to 2 years; introduction of complementary foods of adequate nutritional quality and quantity after the age of 6 months; and improved hygiene practices including hand washing, micronutrient supplementation, salt iodization, growth monitoring, and promotion and management of severe acute malnutrition.

[18]The flow chart of strategy is annexed.

[19]The flow chart of two delivery mechanism is annexed.

deficiency[20], high coverage of post-partum vitamin A supplementation[21], etc. the Directorate of Women Affairs of the Ministry of Women and Children Affairs distributes Maternal and Lactating mother allowance in all unions of three districts.

SCORE: 1.5

3.1.4 Existing programmes focusing food and nutrition security, livelihoods: It was widely believed that the years of conflict had a damaging impact on the well-being of the people and when peace was 'restored', many development organizations expanded their operations into the region.As mentioned earlier, the CHT is very different from other parts of the country in geography, the ethnic composition of the population and agricultural, dietary and cultural practices. The programmes address some of the major problems and challenges facing the region in terms of socio-economic development, human rights and cultural preservation. Besides the above, a number of other initiatives, aimed at enhancing food and nutrition security and increased livelihoods option have been in place such as Vulnerable Group Development Programmes (VGD, Ministry of Women and Children Affairs), school feeding programme in Banderban (WFP), rice banks (UNDP and MJF), agriculture input and saplings distribution (FAO), herbal and medicinal plant garden and link with pharmaceutical industry (e.g. Eco Development), community-level organic compost preservation ('compost shed') and (agro forestry) demonstration plots, establishment of two natural food storages (by Eco Development), productive asset transfer and livestock provision (Caritas, Toymu, UNDP), and agriculture and food security project (UNDP). A social protection programme titled The Chittagong Hill Tracts programme pays an average of BDT 1,644 per thousand, But detail data on allowance is not available. The Non-Bengali Rehabilitation Programme covers near about 0.11 million people and had a budget of BDT 170 million in FY 2011-12. On the other hand, Chittagong Food Assistance Programme covers about 0.71 million people allocating a BDT 2259.0 million budget in FY 2011-12.

SNAP SHOT ON RICE BANK

UNDP and ManusherJonno Foundation (MJF) implement with rice banks with the help of local NGOs to overcome the seasonal food shortage and food crisis, mainly due to rodent attack in 2008 – 2009. The number of rice banks (RB) is 1600 in three districts (UNDP) and 56 in Rangamati and Bandarban (MJF). The community contributed by providing materials such as wood, bamboo etc. to set up the warehouse to store rice. 10 ton (1000 ari) of rice was initially purchased with money from project fund to stock the rice bank. This rice is distributed to poor *jhum* cultivators in the lean period every year and is recovered during harvest. An interest rate is also charged to account for loss and damage. Rice stored in the bank is treated as a revolving fund. Every family who received rice during the lean period has to return two additional ari during harvest. The extra amount of rice is used to meet maintenance costs incurred in operating the RB. A management committee has been trained to run this bank on a regular basis. Based on feedback from the community, these banks are considered useful not only to achieve food security (according to UNDP, food insecure months of the communities with RB have been decreased by almost half from baseline situation) and relief from high interest of money lenders, but also help the community to pay for medical and education expenses of the family members (i.e. by selling the rice taken as loan to pay for the necessities).

[20]The factors that may have contributed to the reduction in the prevalence of VAD in the population are: the agricultural and nutrition-related programmes, such as, home gardening, homestead poultry, nutrition education, promotion of breastfeeding, and fortification of cooking oil with vitamin A.

[21]One of the reasons of this low coverage of post-partum vitamin A supplementation could be low utilization of postnatal care by the mothers (IPHN, 2011).

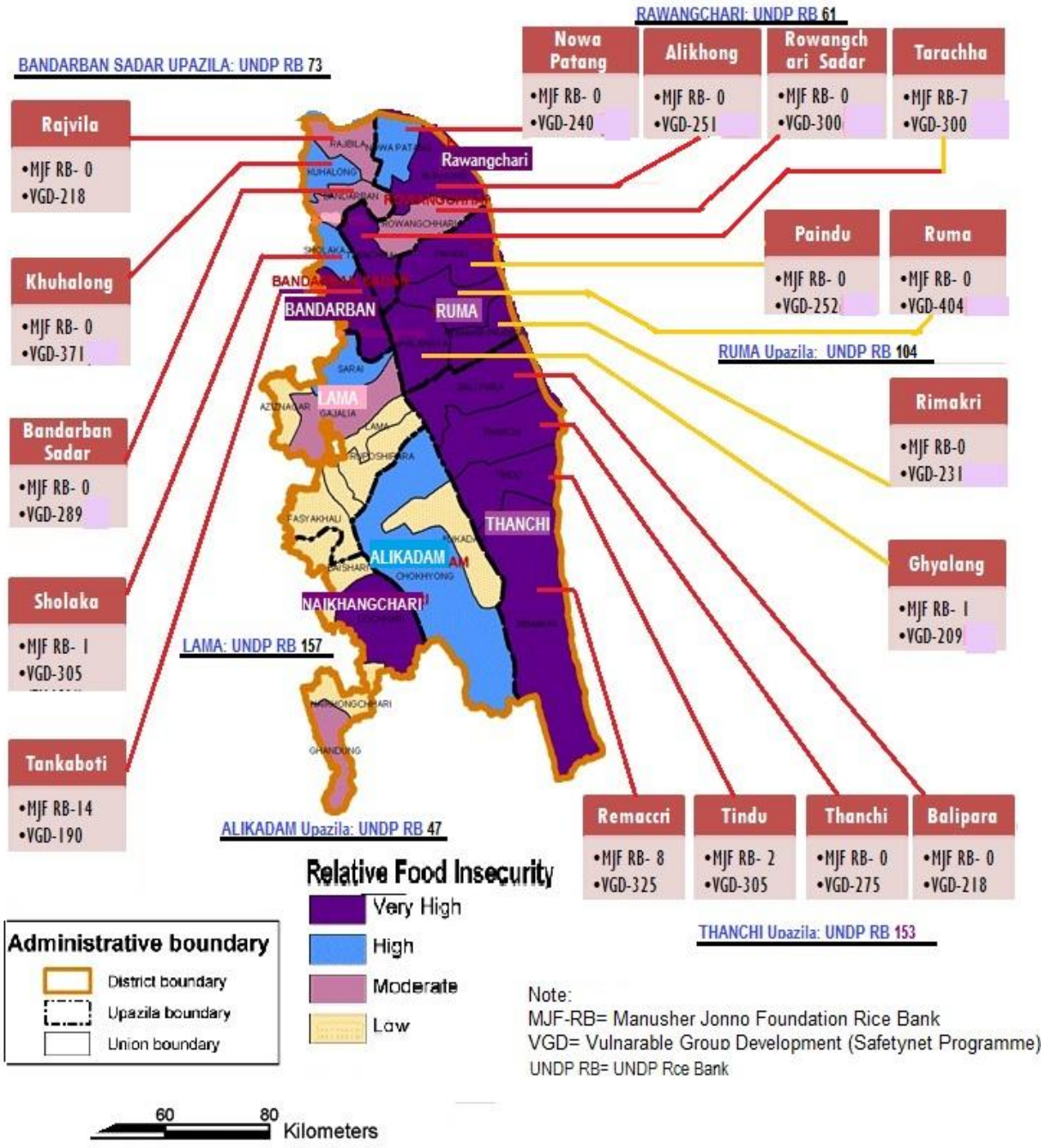
All the existing programmes do not necessarily reflect the issues of ownership of land (access to the natural resource and common property), diversity of dietary practices, perception and belief regarding nutritious foods, proximity of market, reasons of food insecure situation [22], etc. Some of the programmes have scope to explore more based on experiences, such as, provision of seed bank as a result of effective and feasible rice bank initiative (currently seed banks specifically traditional seeds are not in place except one NGO in Khagrachhari), provision of food security initiatives in conflict areas(Currently focus of the food security programmes of some organizations is more on areas where crop damage, low agriculture productivity, etc exists. However, WFP's relative food insecurity map shows unions in Khagrachhari district as high food insecurity where livelihoods and food security interventions are less.). There is an attempt to show presence of rice banks and VGD programmes in relatively food insecure upazilas of two districts. The source of four Relative Food Insecurity level seen in the maps is World Food Programme.

SCORE: 2

[22]The nature and duration of food insecurity vary across the reasons, such as, crop damage by animal, conflict in a specific place and as a result displaced population, price fall of cash crops, limited livelihoods options, decreased productivity of land.

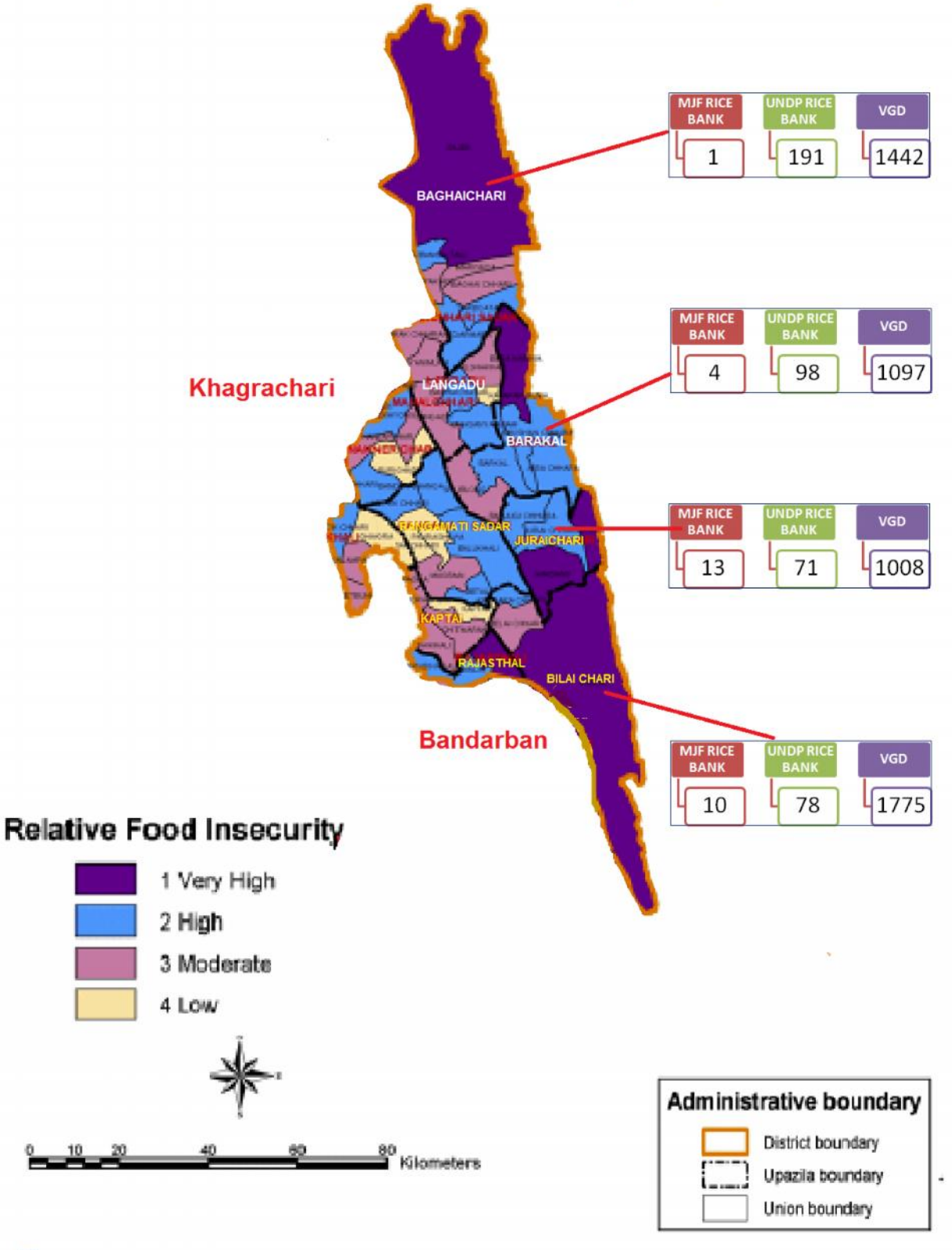
Bandarban District:

Union Level Food Security Map



Note:
MJF-RB= Manusher Jonno Foundation Rice Bank
VGD= Vulnarable Group Development (Safetynet Programme)
UNDP RB= UNDP Rce Bank

Rangamati , Chittagong Hill Tracts
Union level Food Insecurity Map



Vulnerability Analysis & Mapping Unit (VAM)
United Nations World Food Programme

3.1.5 Emergency response: The emergencies (as a result of rodent and wild boar attack) occurred in CHT **has not been captured** in the national disaster management policy and programmes and hence it is not part of standing order and monitoring mechanism. As a result, the response becomes ad hoc without any structured guidelines. For example, WFP, major emergency respondent in CHT, gets information of food insecure situation from newspaper reporting and local NGO partners followed by an internal rapid needs assessment. However, the emergencies should not be confined to response only rather it should be considered as a holistic approach (it should be the part of DRR exercise and eventually development programmes). In addition, the response food package also needs to be revisited to capture indigenous dietary practice and beliefs, even the practice differs across ethnic communities.

SCORE : 2

3.1.6 Research and knowledge dissemination: Existing research does not capture food and market value of agriculture products (specifically uncultivated products) and potentiality and feasibility of the items in market chain, dietary diversity and practice of different ethnic communities specifically difference of food intake for pregnant and lactating mother and its effect on nutritional status of the mother and the children, effect of belief and perception on food consumption pattern, ethnographic studies of different situations affecting food insecurity, etc. The district level government institute (such as, Small Ethnic Minority Institute in Rangamati) has some works on local food culture in daily life and festival time as well as indigenous agriculture production system but these are not well disseminated and shared for different administrative and bureaucratic reasons.

SCORE: 1.5

3.1.7 Dual Local Governance: The local governance system is different from other partS of Bangladesh. The CHT has a dual local governance system known as decentralized local governance system and another one is traditional administrative system[23]. Alongside there exists general state administration Actually this administrative system is the part of central government regulated by Deputy Commissioner with other respected administrative officials. In the decentralized governance system there are four tierof local governance system[24]. On the other hand, there are traditional local governance system alongside the decentralized system which is based on the tradition, customs and values of indigenous communities. Under this system there are three administrative circles i.e. Mong, Chakma and Bomang in each hill district. Each of the circles is headed by their own chief or raja. Each circle is consisted of several Mouzas[25] headed by Headman while Mouzas are again consisted of villages headed by Karbari. Hence chiefs or rajas are engaged formally with government network by holding the position of advisor of their respective hill district councils.

A decentralized local government system is also in effect, where the responsibilities for the management of public services is delegated tothe Regional Council and the three Hill District Councils (HDC). According to Hill District Council Acts of 1989 [as amended after the 1997 CHT Accord- Hill District

[23]Flow chart of the dual governance system is annexed.

[24]The highest tier of local governance is Regional Council (RC) headed by one chairperson and twenty four members (CHT Regional Council Act 1998). Next to it second tire is Hill district council which is also comprised by one chairman and thirty three members [as amended after the 1997 CHT Accord- Hill District Council (amendment) Act 1989]. All these bodies are selected in practice but according to law members and chairpersons of all councils are to be elected where these councils are functioning by the ad hoc appointees. However, the next hierarchy as same as plain land comprising UpazilaParishad headed by one chairman and two vice-chairman and Union Parishad which is set up with one chairman and thirteen members.

[25]In Bangladesh, a mouza is a type of administrative district, corresponding to a specific land area within which there may be one or more settlements. Before the 20th century, the term referred to a revenue collection unit in a pargana or revenue district. Para: The para in CHT is synonymous to the village in the plain land.

Council (amendment) Act 1989] a total of 33 subjects are expected to be transferred from the Ministries to each of the three HDCs. Of these, over half have already been transferred, including health and education. In different government and development partners meetings it was raised and emphasized the need to look at specific CHT Swap mechanism that will fund the development responsibilities that is transferred to HDC. It was highlighted the challenges where there is a tendency for sector support to 'bypass the CHT'. One member raised the concerns in a recent LCG meeting'…*wherein in other countries with similar Peace Accords, the government has put finances behind the function that has been transferred. In the case of CHT, a financing system needs to be in place, also the provision of technical assistance to HDCs to acknowledge their responsibilities for the sectoral mandates. Funding in CHT is still kept with the sector ministries, administered partly by the centre, partly by sector officials at the district and upazila level and in some cases at the union level.'*

SCORE: 3

3.1.8 Food supply and market chain link: The region offers great potentials for lucrative farming of fruits and vegetables. But sadly, no government has yet to draw a comprehensive plan or programme to tap the huge potentials in a sustainable manner. Farmers count losses every year in the CHT, as they often are compelled to sell off their produced crops and fruits at prices lower than production costs due to preservation constraints, lack of transportation facilities, absence of cold storage or fruit processing centre and poor infrastructure in the region. Many growers, who have been denied fair prices of their produces for long, now take least interest in producing seasonal crops and fruits, which leads to the rise in joblessness. Officials of the Department of Agricultural Extension say that some farmers, who are directly or indirectly involved with personal or government-owned forests or orchards, become self-reliant, while many suffer losses, as their farm products perish because of preservation constraints. Even the plenty production of crops and fruits such as orange, banana, jackfruit, sugarcane, pineapple, mango, and papaya does not improve the living conditions of the hilly people. Apart from these fruits and vegetable, a large number of farmers in the area are now producing some major spices including ginger and turmeric, which are meeting around one-fourth of local demands.

Concerns have already been raised over accelerated deforestation (loss of indigenous trees, such as *Chukrasiavelutina*), soil erosion, land degradation and unsustainable agricultural practices. , including monoculture of tobacco, ginger, aroids, turmeric, and other root crops. The monoculture of commercial cash crop of ginger and turmeric often failed due to such reasons as sudden fall of market demand and price, unsuitable site selection, lack of storage, facility, and ineffective supervision and monitoring of the assigned work. The recent findings of Food and Drug administration of USA of the presence of lead in more than acceptable limit in the turmeric powder of a food processing industry in Bangladesh (CHT districts are the main source of turmeric supply of the industry) may limit the future market of home and abroad of any agricultural product.

It is well known that delivery of health, nutrition and WASH services is difficult (for lack of logistics, human resource, finance, etc) because of its unique nature of topography of CHT. However, it is interesting to note that cheap packaged snack fooditems (crackers, juice, soft drinks, etc) are available in these areas even in the remote and 'physically hard to reach' part of the upazila/unions' shops!As in the other parts of the country, there does not exist any regulation of this mechanism.

SCORE: 2.5

3.2 Demand side factors[26]

3.2.1 Knowledge: Nutrition related knowledge of pregnant and lactating mothers is not satisfactory. Majority of them are **not aware** about the **harmful** effect of **micronutrients deficiency** and their nutritional requirements. The mothers' knowledge on breastfeeding and complementary practices is also poor. Only one-third of mothers know that a child should be exclusively breastfed for six months, 41 percent of mothers know that a child should begin complementary feeding at 6 months of age, and only 13 percent of mother mention that a child should be given family food from six months of age. In addition, 15 percent of mothers are not aware of the correct month from which her child can start family food.

SCORE: 3

3.2.2 Nutritional status of child: The prevalence of child **stunting** in children aged 0-59 months is 39 percent, **wasting** in children aged 24-59 months is 53 percent, **underweight** in children aged 0-23 months is 43 percent and 58 percent in children aged 24-59 months). Nearly one-fifth of the women are at least moderately **underweight** (BMI<18.5 kg/m2). **Anaemia** prevalence for children (6-59 months) is 61.9 percent, the prevalence of **night blindness** among children aged 18-59 months is 0.4 percent and that of mothers is 1.1 percent**.** One-fifth of women have received vitamin A supplementation within six weeks of delivery. **Forty percent** (40 percent) of children age 6-59 months received a **vitamin A supplementation** in the six months preceding the survey. **One in five** children comply with the **IYCF recommendations** of consuming breastmilk or other mild products, having the minimum dietary diversity, and having the minimum meal frequency. Feeding according to IYCF recommendations is quite low during ages 6-8 months (3.3 percent), increasing to about 20 percent among 18-23 months old children. One tenth mothers increased the feeding and one third gave the same amount of food during episodes of diarrhea. However, **60 percent** did dangerous practice of **curtailing fluid intake.** About **98 percent** of households reported for **ever breastfeeding** of the children. However, the **initiation of breast-feeding** within one hour of birth is **low (48.7 percent**).

SCORE: 3

3.2.3 Dietary Diversity: The percentage of households that consumed *dal*, eggs and fish regularly is lower in the CHT, although these differences may partially reflect different dietary practices among the ethnically diverse population and the rest of the country. The household members consume more than **300 different food items** in their breakfast, lunch, dinner and snacks. The basket covers: cereals; white roots and tubers; vitamin A rich vegetables and tubers; dark green leafy vegetables; other locally grown vegetables; Vitamin A rich fruits and other fruits including locally grown; organ and fresh meat; eggs; fish and seafood; legumes, nuts and seeds; milk and milk products; oils and fats; sweets; spices, condiments and beverages. The cereal captures large proportion of the basket although the variation in proportion of food intake in other categories is noticed among different ethnic communities.

However, the survey shows that about **65 percent** of households report (from their 24 hour recall) of consumption at least one item from **uncultivated agriculture** products. There is market value of these products as well.

[26]The source of nutrition status of mother and child is Helen Keller International (2010) and UNDP 2009. Dietary diversity and food intake of community, pregnant and lactating mother is generated from the survey of this Mission.

SCORE: 1

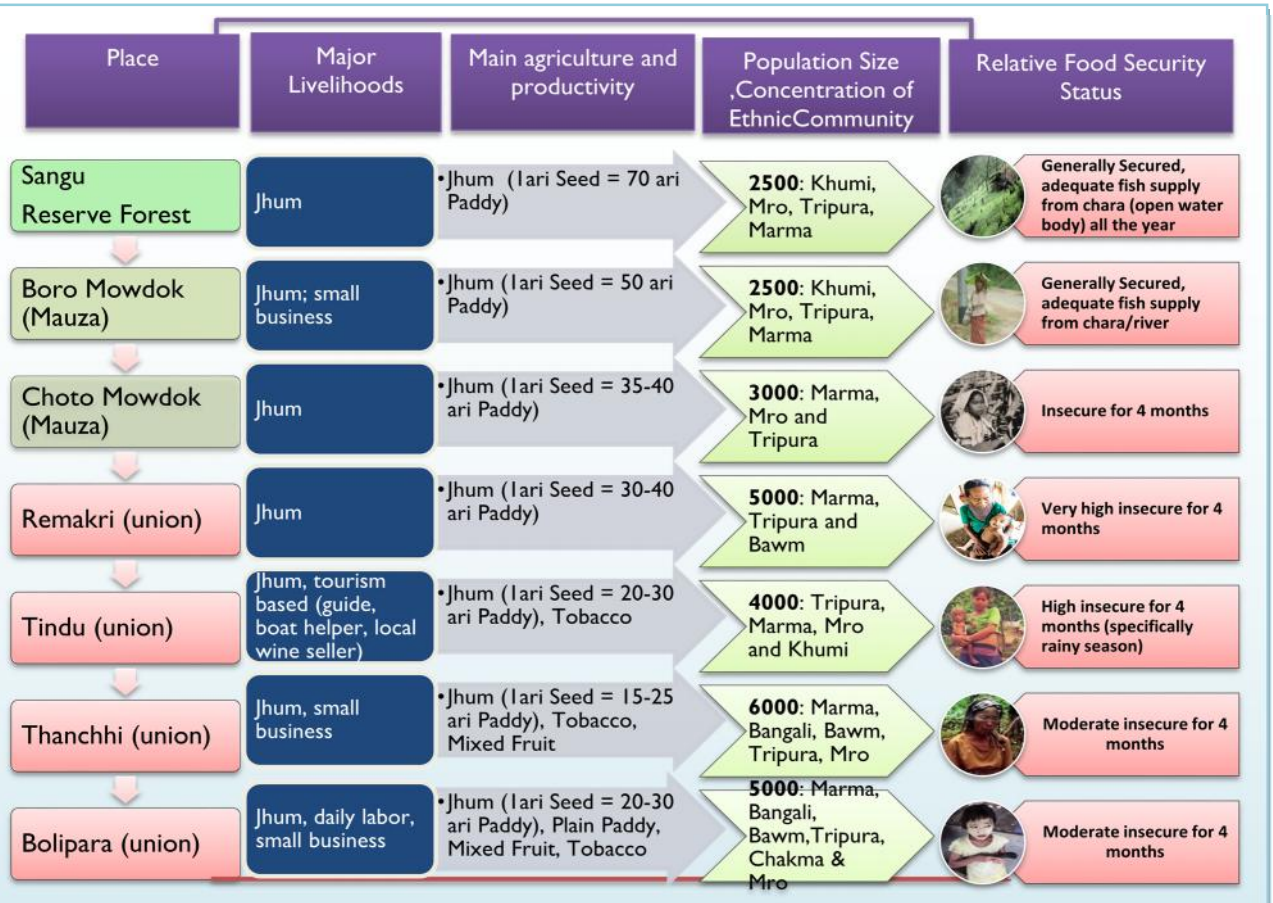
Some widely consumed natural but uncultivated agricultural product

3.2.4 Food intake of pregnant and lactating mother: Cereal based food items are mostly consumed among all members of the household. Only 0.3 percent of pregnant women, 2 percent of lactating mothers, and 2.3 percent of mother of children age 2 to 5 years consume milk and milk products. Although there is dietary diversity among the ethnic communities but dietary pattern clearly points towards generalized protein deficiency among the pregnant and lactating mothers. . The most reported source of protein is fish and seafood which have been eaten by 18 percent pregnant and 7 percent lactating mothers. The majority have **not consumed** sources of **high quality of animal protein** (eggs, chicken, or other meat) during the day. For example, less than 5 percent have eaten chicken or eggs, despite the fact that nearly 80 percent of the women are involved in raising poultry.

Most of the ethnic communities believe that a number of foods (which are nutritious) **should not be eaten** during **pregnancy and lactation**. Indigenous practice and belief also affect their food consumption during this period. For example, in Chakma community, there is a tradition of preparing a number of nutritious foods for lactating mother after child birth, while in other communities (such as, Mro and Marma), just after the child birth, the mother is only given salt, water and rice for at least two weeks.Existing lower hierarchy during food distribution, less access to food of animal origin, and taboos among certain ethnic groups act against mothers consuming appropriate and adequate food during pregnancy and lactation period.

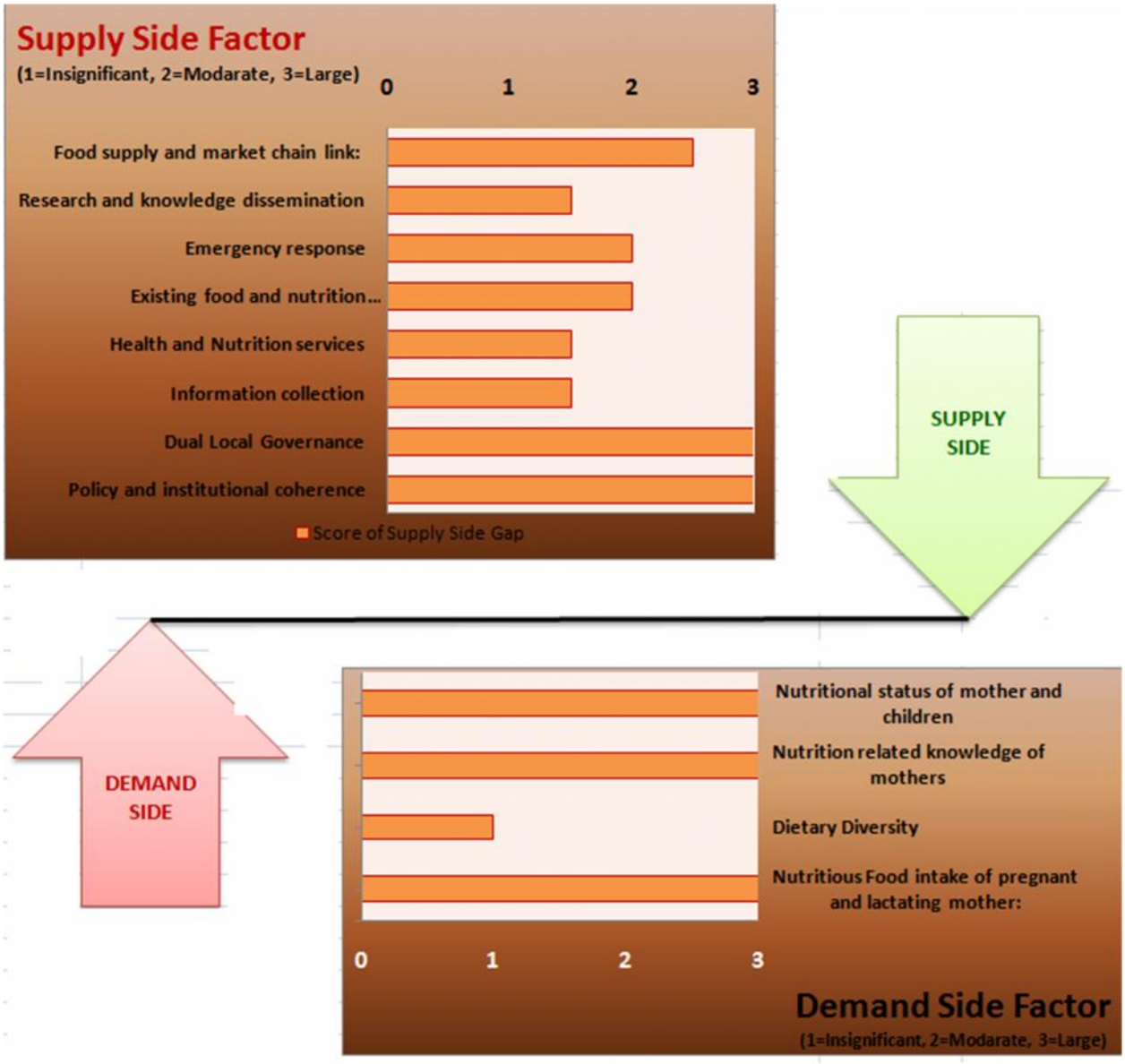
SCORE: 2.5

Agriculture Productivity-Livelihoods-Food Security Nexus



Thanchi is one of the upazilas of Bandarban districts. There are four unions of the upazila: Bolipara, Thanchi, Tindu, and Remakri. These unions and beyond Sadar unions of Remakri (ChhotoMowdok, BoroMowdok, Sangu Reserve Forests) holds strategic importance because of their geographical location and topography, proximity of international boundary (the distance between BoroMowdok and Myanmar border is only 3.5 km and people's alternative livelihoods, e.g. small business and daily needs is also centred on this. They usually go to Myanmar border market to get their essentials rather than going to Thanchi), attractive tourist spot of Nafakhum Water Fall (on which livelihoods of a significant proportion of population at Tindu is dependent), presence of reserves forest, high agriculture productivity in upper streams, concentration of different ethnic communities, presence of Christian missionary (a significant proportion of different small ethnic communities is reported 'converted' to Christianity), appropriate market price of food product (the area produce large amount of fruits and hardly get market price. Last year, mango farmers in Thanchi union were compelled to sell off their produce at BDT 20-40 per kg due to preservation constraints, lack of transportation facilities, absence of cold storage or fruit processing centre and poor infrastructure in the region), vast expansion of tobacco cultivation replacing food crop (specifically at Balipara and Thanchhi), etc. The flow chart confirms that **food security** is **not confined** to only one factor rather it is dependent on agriculture productivity, secured income sources, alternative livelihoods, adequate supply and storage of staple food, etc.

Summary of gap analysis index



The summary is by no means an exhaustive analysis of gaps in attaining food and nutrition security in Chittagong Hill Tracts; rather it provides a glimpse into the status as well as their role to the nutritious status of women and children. The summary shows that few supply side factors such as, policy and institutional coherence, dual local governance, and food supply and market chain link pose large gap while demand side factors low nutrition related knowledge of mothers, nutritional status of children and mothers, and food belief and practice during pregnancy and lactation act as barrier in attaining food and nutrition security in CHT. The interventions aimed at improving the nutritional status of women and children will have to consider these in order to inform recommendations on behavior and consumption depending on the place and population.

Chapter 4: Road to a Better Future (Recommendations)

The analysis shows that the region lags behind the rest of the country. Progress towards better food security and nutrition will require a combination of policies and programmes that together improve household food security, a healthy environment, access to basic health and social services, and care for children and mothers. If interventions are to have their intended goals they must be sensitive to the special needs and problems of this region, including the unique socio-cultural characteristics of each ethnic group and the difficulties in delivering services to a remote and widely dispersed population.

4.1 Comprehensiveness and nutrition agenda: Underlying the fractured institutional response to FNS are competing interests and priorities within and between government, non state actors and development partners. The future planning of any organization in CHT should be comprehensive and cover food availability, access and utilization in an integrated manner. The key goal of the agriculture and livelihoods interventions of different agencies can be to enhance the food and nutrition security of the population through all development components, including increased availability of nutrition rich food. The interventions can be reviewed, discussed and finalized in align with different nutrition agenda[27].

4.2 Institutional arrangements: The organizations can work systematically with partners to broaden the resource base (financial, social, knowledge, human), improve performance and deliver results. The key partners are the government, NGOs, farmer and producer organizations, private sector, consumer groups, and civil society. In order to leverage additional investments, due consideration should be given to partnerships with the private sector and NGOs. There is a need to ensure access to services and facilities of GoB line departments and institutes, such as the Department of Agriculture Extension, Department of Livestock, Department of Fisheries, and Institute of Public Health and Nutrition. There is a need to play a coordinating as well as advocacy role and ensuring active engagement with the key sectors (for example, Ministries of Agriculture, Health and Family Welfare, Chittagong Hill Tracts Affairs, Disaster Management, Education, Livestock, Fisheries).

It is equally important to review the roles of the Department of Forestry, which is *de facto* guardian of the reserve forest with no revealed responsibility for managing its resources, and review the roles of HDC, DAE and upazila agriculture offices and their capacity to support improved agriculture on hill slopes. In addition, the farmers in the CHT region believe that they would get proper prices of their produces with development of agro-processing industry and proper marketing chain. Besides the agro-processing industry, the authorities should help develop a proper marketing chain so farmers can sell their produces at fair prices. Special financial assistance could also be provided to develop a transportation system for the goods, produced in the hill districts. The organization like MJF may consider engaging its resources to identify priority policy areas and advocating for adoption (and implementation) of those policies.

4.3 Inclusiveness and participation: There is a need of a strong, elected and autonomous collaborative framework to guide the actions of stakeholders. Dialogue should be seen as a way to further empower stakeholders to mobilize their own resources, hence broadening the investment resource. Genuine and inclusive dialogue processes should be put in place during implementation so that

[27]Bangladesh is a signatory and active participant in several global campaigns (Scaling Up Nutrition, SUN; REACH) which call for a multi-sectoral approach to undernutrition prevention and feature enhanced commitment and coordination between stakeholders. Informal and other networks of nutrition professionals and agencies including public sector exist (Alive and Thrive (IYCF), Bangladesh Breastfeeding Foundation (BBF), Bangladesh Neonatal Forum (BNF), UNICEF, Save the Children. which can be built on as a problem solving platform to share knowledge and expertise, and enhance capacity.

all stakeholders can effectively participate in the design and implementation of programmes. If the community based organization like Para Development Centre (PDC) can make plan and implement the projects sharing and involving with local government and GoB line departments, it helps to increase people access to those institutions and problems related to project implementation can be solved in easier way. Special efforts are needed to deliver all these interventions to communities that live in remote areas, who need help most, and to adapt strategies to the unique needs of the different ethnic groups. In addition, new generation of ethnic community also need to be sensitized immediately to hold the value of their indigenous food produce before these are replaced by packaged commercial products.

4.4 Information System: Nutrition and food security surveillance is vital so that needs can be identified, sound policy and program decisions made, progress monitored, and strategies modified to meet the changing needs in this region. The surveillance should continue to provide the data needed to formulate advocacy material; to design, monitor and evaluate policies and programmes; and to track progress towards regional, national and international targets for nutrition and food security.

4.5 Structured and co-ordinated exploration of knowledge and practice: Local knowledge, wisdom (including some of popular agroforestry and cropping technologies), and practice should be analysed, documented, disseminated and considered in designing an intervention. This would be useful to identify food and nutritional value of uncultivated agricultural products consumed by the people in the region. Both short-term (such as wider social safety-nets) and long-term (such as economic or livelihoods security) interventions are also needed to minimize the gap in consumptions of quality (animal protein and fat-rich) foods.

4.6 Designing multi-sector nutrition interventions: The study findings demonstrate that pregnant and lactating mothers consume less food than other members of the household. Existing lower hierarchy during food distribution, less access to food of animal origin, and taboos among certain ethnic groups all act against mothers consuming appropriate and adequate food during this time. There is a need to gather **community-specific information** in order to design specific interventions for adolescent girls, mothers and children. In order to succeed, interventions will have to work with community members who are convinced that the goal of improving nutrition is a worthwhile activity with long-term benefits. **Advocacy** that demonstrates the **undesirable status** of their **children's nutrition** could be the **entry point** for a nutrition intervention. Collection of information on nutritional status through anthropometric assessment, including pictorial comparison of the weight and height of children of the same age, would be one of the approaches for advocacy. The diversity in beliefs needs to be studied and messages need to be developed according to National Nutrition Service Operation Plan to promote **beneficial practices** and prevent **harmful behaviours**. The **messages** should be **translated** into different communities' language for acceptance and long term sustainability. For disseminating the knowledge to the targeted people, different mechanism can be thought of depending on the location, proximity of health service providers, etc. Community clinic (Ministry of Health and Family Welfare), women member of Union Parishad, religious and community leader are few examples. In this regard, institutions like Ministry of Health and Family Welfare, Ministry of Women and Children Affairs, Ministry of Local Government, Rural Development and Cooperatives, Hill District Council should be involved from the beginning of the process.

4.6 Sustainability, with a particular focus on environment, local practice and habit: The activities should be designed and implemented in ways that ensures quality, impact and sustainability. Serious attention must be paid to ensure that all interventions are environmentally sustainable. Serious attention must be paid to ensure that the interventions do not degrade the environment, local practice and habit.

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ANNEX

Annexure-1: Nutritional Studies and Gap Analysis –Terms of Reference

BACKGROUND

SAFANSI is supporting a project aimed at "enhancing knowledge and awareness of critical factors that promote food and nutrition security among women's groups in the BEES network, through a network system of learning and capacity outreach."

This project helps to increase the commitment of governments and development partners to more effective and integrated food and nutrition-related policies and investments in the following ways:

(a) Ensures year-round supply of food and essential consumer items to marginal/ vulnerable communities
(b) Cushions vulnerable communities from price shocks by bulk purchase/ direct procurement from farmers
(c) Adopts a multi-sectoral approach towards addressing hunger and malnourishment
(d) Uses women and their groups to achieve food and nutrition security and disseminate health and hygiene messages
(e) Supports the creation of wealth and poverty reduction by encouraging a viable economic model
(f) Encourages leadership by promoting women as chief implementers at every level of the project

The project addresses multiple areas of ensuring livelihood and employment security through achieving food and nutrition security among the poorest in the South Asia Region (SAR). The project adopts a multi-stakeholder approach thereby using grassroots organizations and groups as well as stakeholders at the policy making, implementation and technical levels to achieve this goal. Further, it leverages the World Bank supported BEES network to access stakeholders and reach communities to achieve results, thus ensuring development and customization of nutritional messages according to specific nutritional challenges in communities, for example. It envisages dissemination of these messages through creative toolkits and community focal points. It involves learning through exchange visits, documentation of best practices and their context-specific adoption. It envisages a strong partnership, awareness, learning and capacity enhancement on food and nutrition security. Through the BEES network, the project aims to reach almost 100 million poorest women in the region. Four members are currently participating in this project. These members represent a diverse cross-section of geographical and ethnic landscapes and include people from hill communities (Bhutan and Chittagong Hill Tracts in Bangladesh), arid and desert areas (Gujarat, India) and women in post-conflict environments (North and Eastern Sri Lanka). The project has two components, of which the first – **capacity building, learning and outreach** – requires localized nutritional studies and a gap analysis to be undertaken in project areas in Bangladesh, Bhutan and Sri Lanka.

Rates of malnutrition in **Bangladesh** are among the highest in the world. More than 54% of preschool-age children, equivalent to more than 9.5 million children, are stunted, 56% are underweight and more than 17% are wasted. Although all administrative divisions were affected by child malnutrition there were important differences in the prevalence's of the three anthropometric indicators. The prevalence of underweight ranged from 49.8% in Khulna to 64.0% in Sylhet which also showed the highest prevalence of stunting (61.4%) and wasting (20.9%). Despite the high levels, rates of stunting have declined steadily over the past 10 years.

Bangladeshi children also suffer from high rates of micronutrient deficiencies, particularly vitamin A, iron, iodine and zinc deficiency. Bangladesh should be commended for making significant progress in reducing vitamin A deficiency (VAD) among preschool children over the past 15 years; however, consumption of vitamin A rich foods is still low, suggesting that the underlying causes of VAD require further attention and support. Anemia is also highly prevalent among children in Bangladesh and few programs have been initiated to improve their iron status.

Malnutrition among women is also extremely prevalent in Bangladesh. More than 50 percent of women suffer from chronic energy deficiency and studies suggest that there has been little improvement in women's nutritional status over the past 20 years. As observed for children there were important differences in the prevalence of women malnutrition among administrative divisions. The prevalence of women with a BMI<18.5 kg/m2 ranged from 47.6% in Khulna to 59.6% in Sylhet. Clinical VAD is common among women of reproductive age and during pregnancy. Sub-clinical VAD and anemia are also highly prevalent among pregnant and lactating women. Programs in Bangladesh also need to begin to incorporate components for adolescents and school-age children who will also benefit from improvements in nutrition.

Improving nutrition can have a significant impact on survival as well as physical and cognitive development and productivity. Good nutrition, comprising adequate quality and quantity of food intake and reduction of illness is also a basic human right and is an essential input for economic development.
Significant progress has been made in cereal production in Bangladesh over the past decades. However, the rapid population growth and resulting high and growing food requirements pose a difficult challenge given the limited availability of cultivable land in Bangladesh. Re-occurring disasters further complicate the stability of food production. Recently the government of Bangladesh and other NGOs are encouraging non-cereal food production and consumption along with food self-sufficiency. Greater attention is being given to supportive policies for agriculture input, research on non-cereal crops, and commercial and homestead promotion of poultry and fruits/vegetables are receiving greater attention. There is a clear need to diversify food sources both in terms of land/environmental sustainability, development of the rural economy and increased consumption to achieve improvements in the nutritional status of the people of Bangladesh.

The SAFANSI project will be undertaken in Banderban and Rangamati, Chittagong Hill Tracts (CHT) of Bangladesh. Manusher Jonno Foundation (MJF) has innovated with Rice Banks (RB) in this region to overcome the seasonal food shortage and food crisis due to rodent attack on *jhum* (slash and burn cultivation) fields in 2008 – 2009. The community contributed by providing materials such as wood, bamboo etc. to set up the warehouse to store rice. 10 ton (1000*ari*) of rice was initially purchased with monies from MJF project fund to stock the RB. This rice is distributed to poor *jhum* cultivators in the lean period every year and is recovered during harvest. An interest rate is also charged to account for loss and damage. Rice stored in the bank is treated as a revolving fund. Every family who received rice during the lean period has to return two additional *ari* during harvest. A management committee has been trained to run this bank on a regular basis. Guidelines for operating these banks were developed in consultation with the community, which included systems of management and maintenance.

Based on feedback from the community, MJF reports that these banks are considered so useful that neighboring communities wish to replicate the initiative. The government has recognized food banks as successful instruments in fighting poverty of *jhumia* people. Enabling these banks to become economic models ensuring nutrition security at cheap rates is the logical next step in making the initiative sustainable.

TASKS TO BE FULFILLED

This TOR consists of two tasks:

(a) Undertaking one localized food security and nutritional studies
(b) Correlating these studies with existing literature on food and nutrition security and detailing a gap analysis in project areas

A. Nutritional Study

One localized study will be conducted to understand (a) existing community food security, (b) food habits and dietary intake by 24 hour recall method and (c) local practices at achieving food and nutrition security that can be strengthened. Studies will be conducted among populations that have a history of low nutritional status and are below poverty line/ ultra poor (as identified by the government).

- The study will be both qualitative and quantitative, will include a strong **research methodology** and **design**.
- Organisations conducting the study will identify, with justification, the **sample**.
- The study should demonstrate diet among children under five, pregnant and lactating women (children of under two years of age). The study should also demonstrate variation in feeding practices by gender/ age and income. Gross nutritional status of a small sample of under five school going children surrounding the rice bank
- The study should enable **assessment of gaps** in achieving food and nutrition security at the community level

B. Gap Analysis

This activity is an outcome of assessment of existing nutritional studies and documentation on food and nutrition security in each country and the outcome from localized nutritional studies in project areas identified. The Gap Analysis will –

(a) Undertake an **overview** of existing food and nutrition security initiatives in CHT
(b) Provide clear indication of community level initiatives that need to be **strengthened and scaled up in CHT**
(c) Identify areas where **additional support** needs to be given to achieve food and nutrition security

This will further provide the group with data and information for strategic interventions during the SAFANSI grant period.

TIME PERIOD

The time during which these tasks have to be completed is six weeks – from 15th September until 9th November, 2013.

Purpose of the assignment:

- Detailed gap analyses to identify the limitations of achieving Food and Nutrition Security in CHT and key elements that are currently absent in their existing initiatives as well as highlight interventions that have had significant impact.
- A localized study to understand attitudes and behaviors towards FNS and practices among children under five, pregnant and lactating women (children of under two years of age) to address specific gaps highlighted.

OUTPUT

A comprehensive **report** on gap analysis and on existing local food and nutritional Knowledge Attitude and Practices KAP among children under five, pregnant and lactating women (children of under two years of age) at local level will be produced.

Set of **recommendations** should be included to develop customized messages for stakeholders – communities, network staff and grassroots organizations.

Work modalities:

- MJF will provide the list of partner working with rice bank program in two districts of Chittagong Hill Tracts (Rangamati and Banderban)
- Review relevant documents (proposal, reports and evaluation).
- Consultation with NGO partners and other relevant stakeholders
- MJF will provide logistics and arrangement for field visits which includes training and pre-testing of data collection, field data collection, printing of data collection instruments, inter-district and field travel, accommodation, and food of consultant and associate, stakeholder consultation workshop)

Time Period:

The total period of providing Consultative services will be for eight weeks, which includes desk review, preparing and finalizing methodology and data collection instruments, training, pre-testing, field study, data coding, entry and analysis, facilitating stakeholder consultation, drafting two reports and final report submission.

Annexure 2: Seasonal Calendar

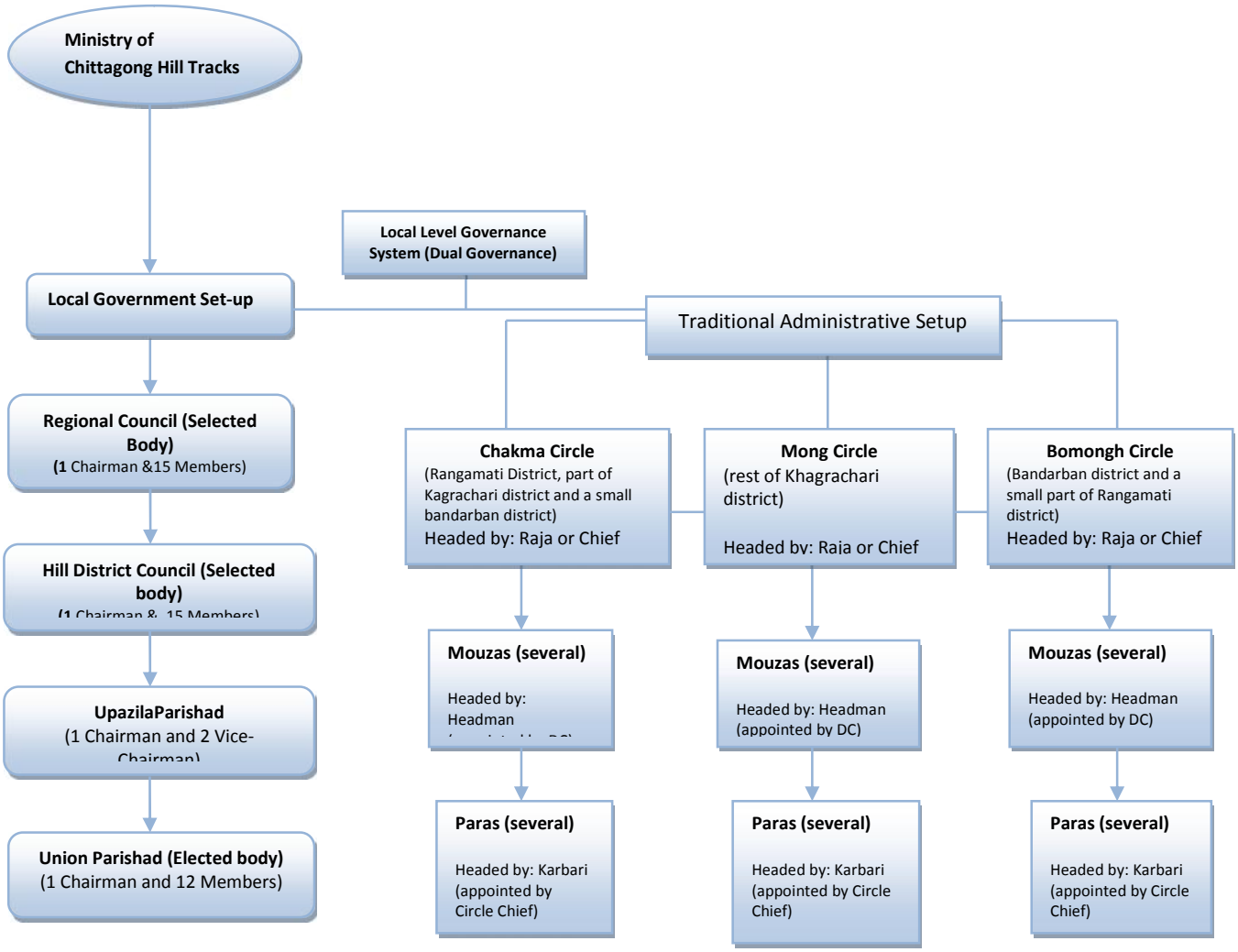
Activity	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-June	June-July	Jul-Aug	Aug-Sep	Sep-Oct	Oct- Nov	Nov- Dec
Regular Jhum Cultivation			Slash & burn		Seeding broadcast/dibbling	Weeding, thinning, insecticide spray (if any)			Rice and maize harvest			
						Vegetables/ Marpha harvest			Chili harvest			
					Weeding/basal fertilizer does (if any)		Top dressing (if any)			Pumpkin/Cheena harvest		
										Brinjal, flower harvest		
							Melon harvest				Sesame harvest	
							Cucumber, gourd harvest				Cassava harvest	
												Cotton, turmeric, ginger, arum harvest
Plantation		Peanut planting		Peanut harvest	Banana planting			Banana harvest*				
			Fishing									
Bamboo/Labor	Bamboo harv. (DS)					Limited bamboo harvest					Bamboo harvest (DS)	
						Limited bamboo harvest				Bamboo harvest (US/North)		
Labor for tobacco			Harvesting/drying						Seeding		Transplanting	
Other labor	No work in the field											
FS***						Extreme food insecurity						
FS**	2.4	2.2	2	2	1.9	1.8	1.9	2.1	2.3	2.3	2.4	2.5
Months in Marma	Prato	Tabothe	Tabon	Teikhung	Kachchum	Naium	Wachcho	Wakho	Tochelang	Wajion	Taurybgbonk	Naito

* Banana is harvested after about 15 months of planting. ** Average food security status for indigenous communities, reported in UNDP (2009). *** Food security status as reported by respondents from affected areas in the eastern hilly regions. Upstream (US)/North and Downstream (DS)/South

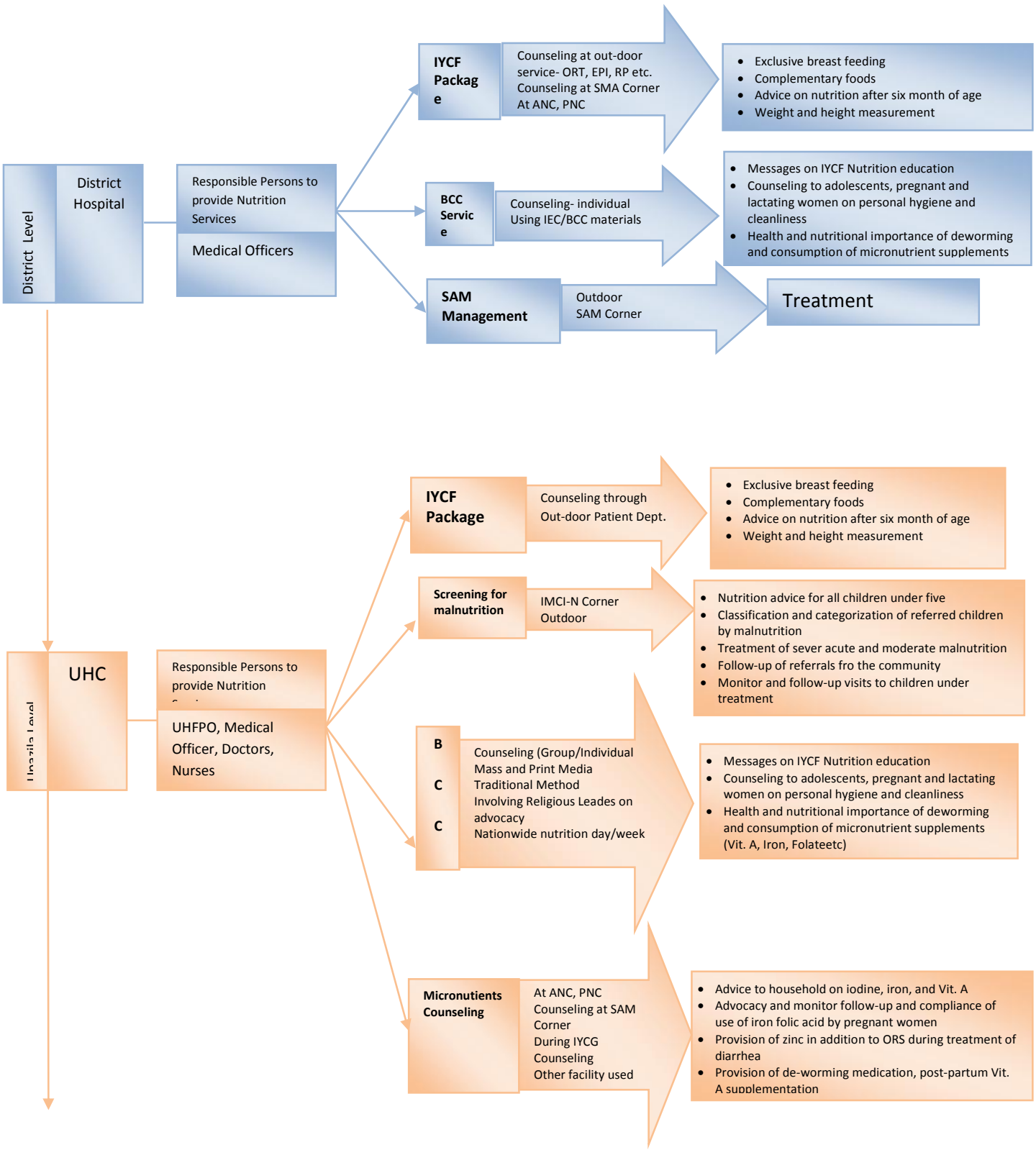
Annexure3: Dependency table

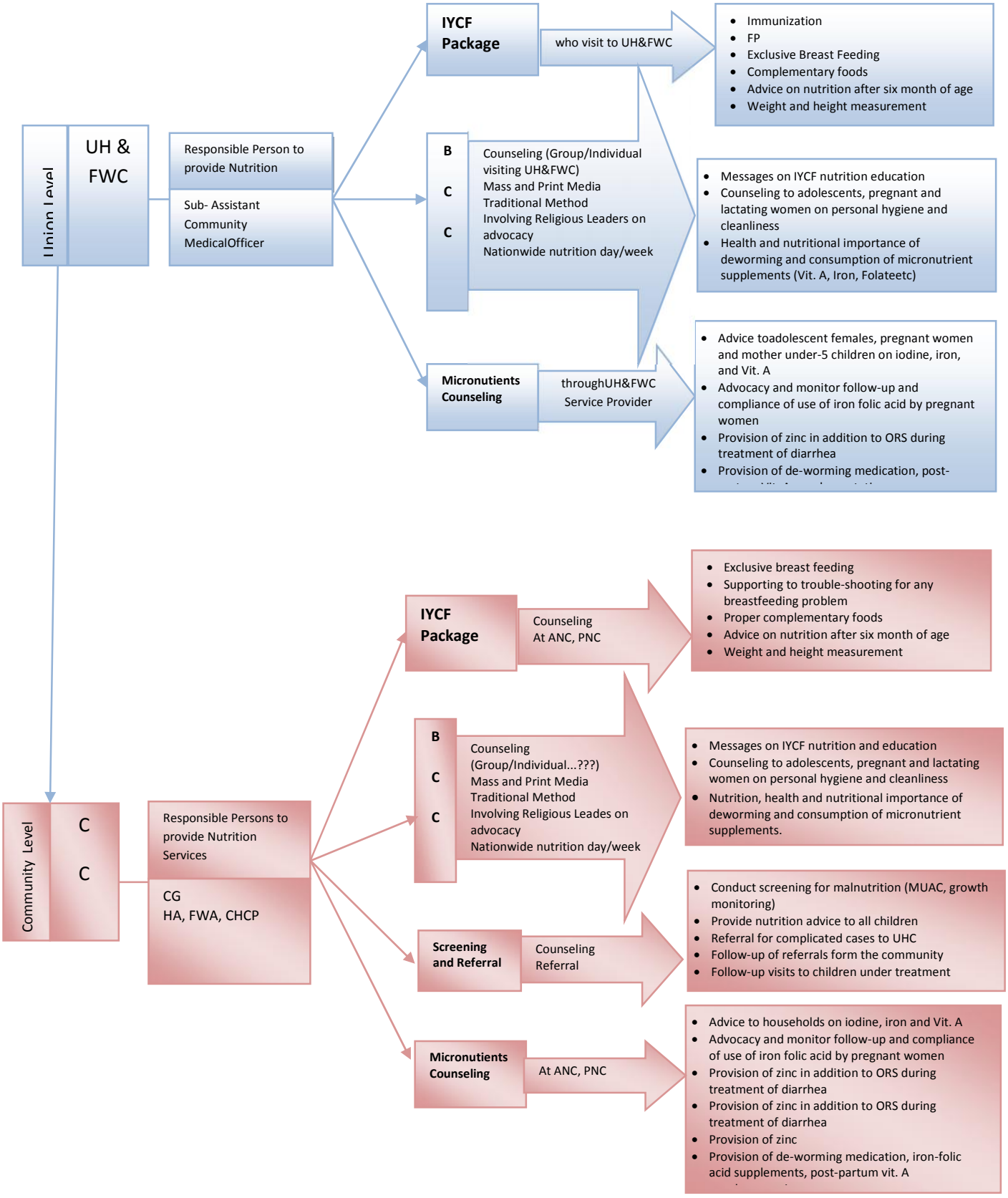
Status	Activity	Subsistence (months)	Remarks
Non-Poor	Jhum	12+	Has stock of seeds for the following year, surplus to lend out as well
	Control over natural resources - rent and trade		For business, better education of children and attending to better health care services. there is also investment on business and lending
	Shops/business if in close proximity to market places		
	Poultry, pigs & other livestock		
Average Poor	Jhum (own)	7	
	Forest products (including bamboos)	2 (0.5 from bamboos)	
	Labor in (others) hJum	1	Often committed against borrowing of paddy during slack season
	Fishing	0.5 to 1	depends on location
	Labor in other agriculture (including tobacco) & non-agriculture activities		Employment in non-agriculture depends on locations
	Procuring food from forest	0.5	

Annexure4:GoBAdministration and Local Government in Chittagong Hill Tracts

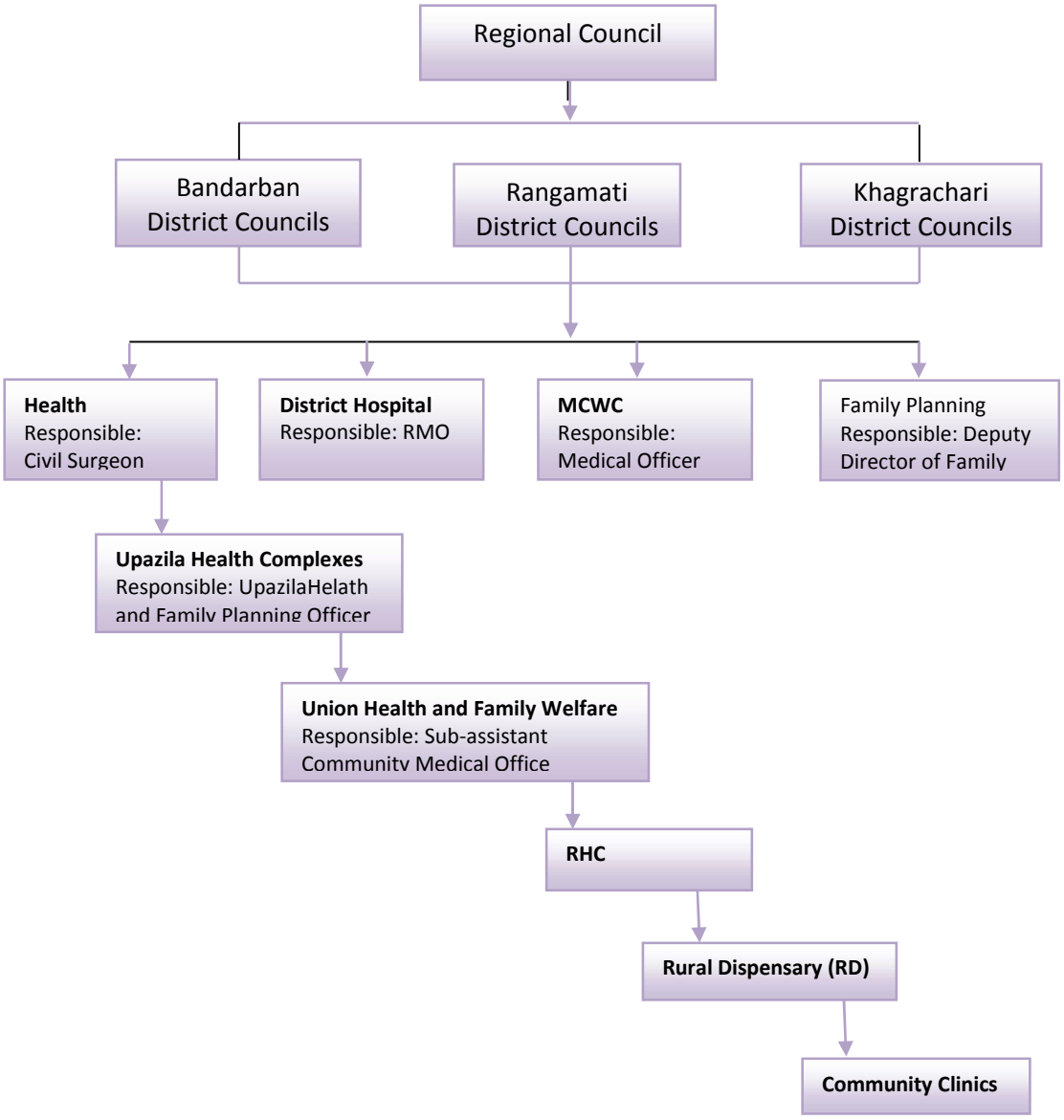


Annexure5:Nutrition Service Delivery at Local Level (District to Union)




Union Level
UH & FWC
Responsible Person to provide Nutrition
Sub- Assistant Community MedicalOfficer
IYCF Package
who visit to UH&FWC
Immunization
FP
Exclusive Breast Feeding
Complementary foods
Advice on nutrition after six month of age
Weight and height measurement
B C C
Counseling (Group/Individual visiting UH&FWC)
Mass and Print Media
Traditional Method
Involving Religious Leaders on advocacy
Nationwide nutrition day/week
Messages on IYCF nutrition education
Counseling to adolescents, pregnant and lactating women on personal hygiene and cleanliness
Health and nutritional importance of deworming and consumption of micronutrient supplements (Vit. A, Iron, Folateetc)
Micronutients Counseling
throughUH&FWC Service Provider
Advice toadolescent females, pregnant women and mother under-5 children on iodine, iron, and Vit. A
Advocacy and monitor follow-up and compliance of use of iron folic acid by pregnant women
Provision of zinc in addition to ORS during treatment of diarrhea
Provision of de-worming medication, post-
Community Level
C C
Responsible Persons to provide Nutrition Services
CG
HA, FWA, CHCP
IYCF Package
Counseling
At ANC, PNC
Exclusive breast feeding
Supporting to trouble-shooting for any breastfeeding problem
Proper complementary foods
Advice on nutrition after six month of age
Weight and height measurement
B C C
Counseling
(Group/Individual...???)
Mass and Print Media
Traditional Method
Involving Religious Leades on advocacy
Nationwide nutrition day/week
Messages on IYCF nutrition and education
Counseling to adolescents, pregnant and lactating women on personal hygiene and cleanliness
Nutrition, health and nutritional importance of deworming and consumption of micronutrient supplements.
Screening and Referral
Counseling
Referral
Conduct screening for malnutrition (MUAC, growth monitoring)
Provide nutrition advice to all children
Referral for complicated cases to UHC
Follow-up of referrals form the community
Follow-up visits to children under treatment
Micronutients Counseling
At ANC, PNC
Advice to households on iodine, iron and Vit. A
Advocacy and monitor follow-up and compliance of use of iron folic acid by pregnant women
Provision of zinc in addition to ORS during treatment of diarrhea
Provision of zinc in addition to ORS during treatment of diarrhea
Provision of zinc
Provision of de-worming medication, iron-folic acid supplements, post-partum vit. A

Annexure 6: Health Service Delivery in Chittagong Hill Tracts



Annexure 7: Chittagong Hill Tracts Union Level Relative Food Security Map by World Food Programme