
Community Dialogue:

Bangladesh

Natural Resource Management
and Indigenous Peoples



Chittagong Hill Tracts
September – October 2007

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1. Introduction

This report is the result of a project supported by United Nations Development Programme (UNDP) Regional Initiative on Indigenous Peoples' Rights and Development (RIPP), carried out during September and October 2007.

The aim of the project is to draw out concrete examples of the stewardship role that indigenous peoples play in responding to climate change and in retaining their cultural and traditional landscapes.

The Chittagong Hill Tracts Community Dialogue is part of a series of six Community Dialogues to take place through 2007-2009 on indigenous peoples and natural resource management. These will be held in six areas rich in bio-cultural diversity: in the Chittagong Hill Tracts of Bangladesh (the current report); the tropical forests of Sabah, Malaysia; the sloping terraces of the Cordillera region, Philippines; the swidden fields of northeast India; in Nusantara, in the Indonesian archipelago; and northern Australia.

The six Community Dialogues form part of a broader, inter-linked multi-dimensional strategy initiated by UNDP-RIPP in 2005 on *Natural Resource Management and Land*. The aim of the overall programme is to provide a space for meaningful dialogue between policy makers and indigenous peoples on natural resource management and cultural sustainability. The strategy includes a Regional Dialogue, held in Chiang Mai, Thailand, in November 2007, and a Global Dialogue, complemented by pilot projects on sustainable bio-culturalism and adaptation to climate change.

The results and momentum of the Regional Dialogue and Community Dialogues will be shared and inform the Global Dialogue at the 7th Session of the UN Permanent Forum on Indigenous Issues (April 2008), under the theme: *Climate Change, Bio-Cultural Diversity and Livelihoods: the Stewardship Role of Indigenous Peoples and New Challenges*.

2. Method of Documenting ‘Good Practices’

The aim of documenting ‘good practices’ is to draw out concrete examples of the stewardship role that indigenous peoples are playing in climate change and in retaining their cultural and traditional landscapes. Documentation involves young indigenous leaders acting as facilitators, tasked with gathering stories from elders and senior members of their communities to ensure these wonderful experiences and life lessons are shared widely for emulation and inspiration.

2.1 Process

The following methods were used to collect information for documenting ‘good practices’:

Team of indigenous facilitators: Six young facilitators—three each from Rangamati and Khagrachari Hill Districts – and two resource persons, were assigned to document the good practices. In consultation with the other young indigenous facilitators, the two resource persons prepared guidelines for the collection of information from elders.

Field visits: The young facilitators visited the villages of four indigenous communities—Chakma, Marma, Tripura, Tanchangya and Pankhua. In consultation with the village leaders, elders were selected to share their oral traditions through story telling and interviews.

Story telling: In the two districts, a total of 50 elders were interviewed to document their life experiences in natural resource management.

Community Dialogue: As part of collecting information, a Community Dialogue was organised in Rangamati. Representatives from across generations and gender—elders, middle-aged and youths—were invited to participate in the dialogue, which involved lively sessions sharing experiences, constraints and prospects of natural resource management systems of indigenous peoples.

2.2 Documenting the Stories

During the documentation of elders’ stories, the term ‘natural resources’ was understood to have many meanings. The term encompasses different resources, including soil, hills, forests

and water, as well as little insects, animals and birds. While talking with the elders, facilitators observed that the discussion largely centered on *jhum* (shifting) cultivation, livelihood concerns and land alienation processes.

There were no definite variables or parameters for determining what constitutes a ‘good practice’. Based on discussions, it was agreed to use some criteria as determinants of good practices. A practice may be considered ‘good’ only if:

- (i) The resource is used in a sustainable manner;
- (ii) It gives greater benefit to the community;
- (iii) Enhances community solidarity; and
- (iv) Is easily manageable.

Based on these elements, ‘good practices’ of indigenous communities were discussed and documented during the Community Dialogue.

3. Background on Chittagong Hill Tracts

The Chittagong Hill Tracts (CHT)—comprising the three Hill Districts of Bandarban, Khagrachari, and Rangamati — lies in the southeast of Bangladesh. Its total land area is 5089 square miles, accounting for one-tenth of Bangladesh. The CHT is home to eleven indigenous peoples: Bawm, Chak, Chakma, Khumi, Khyang, Lushai, Marma, Mro, Pankho, Tanchangya and Tripura. The total population is around 1.3 million. Each indigenous peoples has their own language, culture, traditions and belief systems.

Indigenous peoples are traditionally dependent upon swidden agriculture locally known as *jhum* cultivation. *Jhum* is also known as ‘rotational’ or ‘swidden’ agriculture. To the indigenous peoples of the CHT, *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. An indication of this important linkage is the term used to describe the indigenous peoples of the CHT. They are collectively known as *Jumma*, meaning ‘hill people

who practise *jhum*'. Although originally used as a derogatory term, it has evolved into a symbol of collective identity and pride in a rich cultural heritage.

Most *Jummas* are agriculturists, primarily practicing subsistence farming with limited cash crop production. The principal crop is rice. Other vegetables, such as corn, sesame, lentils, chili, ginger, turmeric, garlic, beans, pumpkin, and cucumber are also sown together with the rice, and supplement the family diet as well as providing extra income. Even to this day, a large portion of indigenous peoples depend upon *jhum* for rice production and as the main source of their subsistence and livelihood.

Over the years, there have been many changes in *jhum* cultivation, not only in terms of intensity and crop diversity, but also in fallow management. The general practice of 7-10 years minimum fallow period has been reduced drastically, reducing the soil fertility and crop yield.

Surrounding *jhum*, indigenous peoples have many practices, taboos, beliefs, and folklore, passed down from generation to generation. This is mainly done through oral traditions, and there is limited written documentation of this knowledge. By drawing on indigenous knowledge and technologies, the indigenous peoples sustain and protect the rich biodiversity in the CHT region. One way they achieve this is through the management of village common forests using *jhum* agro-forestry methods.

About 75.6 percent of the total land area of the CHT is hilly/ high-land. Land scarcity is a major and increasing problem. State-sponsored migration¹ from the lowlands to the Hill Tracts has resulted in large-scale settlement of plains/non-indigenous farmers, with the settler families being provided with lands, most of which are indigenous lands. This has resulted in encroachment on large swathes of indigenous peoples' land. Following the construction of the Kaptai Dam in 1960, the 100,000 or more displaced indigenous peoples whose land had been inundated were forced to resettle in Rangamati and Khagrachari districts of the CHT. A significant number did not receive land suitable for wet-rice plough

¹ Approximately 450,000 settlers were moved to the CHT during mid-1980s.

cultivation and as a result took up horticulture and fruit gardening, produce for which they struggle to get a fair price. They now struggle to maintain a bare existence.

Faced with this situation, the indigenous peoples of the Chittagong Hill Tracts came to understand the importance of education in securing their future. Those with even the smallest income make tremendous efforts to send their children to school. As a result a significant number of *Jummas* have high levels of education, perhaps the only positive impact of the Kaptai Dam for indigenous peoples.

The CHT has a dual governance system. Alongside general state administration, there is the traditional governance system. 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. 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.

Against this backdrop, the Community Dialogue sought to document 'good practices' of the *Jummas* by listening to and recording indigenous elders' stories. In preparing this report, a total of 50 persons were interviewed.

4. Key Findings

As mentioned earlier, the term 'natural resources' has many meanings to indigenous elders in the CHT. However, the discussion largely centered on *jhum* cultivation as the main focus for natural resource management, as well as current livelihood concerns and relevant practices attached to *jhumming*. Elders also talked about forest management and policy issues, and the impact of teak plantations on the system.

The following subjects were central in documenting ‘good practices’:

- *Jhum* cultivation.
- Relevant belief systems/ taboos for *jhumming*.
- Forest management, especially village common forests managed by communities.
- Coping strategies of *jhum* cultivators.

4.1 *Jhum* Cultivation: an Indigenous System of Hill Farming

There are many debates and myths about *jhum* cultivation. To outsiders, *jhum* cultivation is considered a primitive mode of agriculture, while to indigenous peoples *jhum* is not simply a method of agriculture, it is a way to maintain different crops simultaneously, while at the same time it is a source of identity, culture, and inspiration. All indigenous communities in the CHT once practiced *jhum* on the hill slopes.

With the passage of time, there have been many changes in *jhumming* patterns. In earlier times, *jhum* provided food security and also for all their needs for the indigenous communities; it is constrained by many factors now.

Jhum Cultivation as ‘Good Practice’

Indigenous elders consider *jhumming* to be a good practice for natural resource management, for the following reasons:

Multi-crops: *Jhum* is a multi-crop production system—*jhum* cultivators combine rice production with various other crops such as melon, gourd, pumpkin etc. They are all sown together, providing a steady source of food and nutrients.

Regeneration of new forests: Fallow *jhums* can create new forest cover. The regenerated forests are used as sanctuaries for birds and animals. They also provide wild vegetables and crops to meet the needs of indigenous communities.

Big trees are not felled: Forest is needed for *jhum* cultivation. It is therefore common practice among *jhum* cultivators not to fell all trees, and especially not big trees.

Fire control: There is an erroneous belief that setting fire to the *jhum* is harmful for the environment; this is not completely true. *Jhum* farmers follow certain rules to control the fire within their *jhum* field by making a fire control line, which prevents fire from spreading beyond the field. The ashes are nutrients and fertilizers for the soil.

Source of knowledge and culture: There are many songs, dances, stories and poems about *jhum*. *Jhum* is a store-house of indigenous knowledge and culture.

Customary laws: *Jhum* is practiced according to customary laws.

4.2 Challenges for *Jhum* Cultivation

For centuries *jhum* cultivation worked effectively: there was no serious deterioration of the soil and plots lay fallow for a minimum of seven to twelve years. This allowed regeneration of the soil and natural growth of the forest. However, due to heavy population pressure in recent years, cultivation cycles have shortened, causing an imbalance in the system. As originally practiced, the fallow cycle was long enough to allow the soil to regenerate and allow the natural vegetation to re-grow, but with the decreasing amount of land available for *jhum* with the construction of the Kaptai reservoir and the large scale non-indigenous settlement, this is now a major cause for impoverishment and further marginalization of the indigenous peoples.

Over the years this has been compounded by a number of other factors that challenge and constrain *jhum* cultivation. During discussions with the elders, the following factors were identified as major challenges:

- Land acquisition by government agencies, such as the Chittagong Hill Tracts Development Board (CHTDB) and the Forest Department (FD);
- Land grabbing by outsiders (state-sponsored settlers and voluntary migration);
- (Over)-extraction of forest resources;
- Population increase;²
- Private property rights/ individualism; and
- No pro-people forest resource management policy.

All these factors progressively lead to low access and control over forests resources and *jhum*. As a result, indigenous knowledge is being lost.

4.3 Strategies for Adapting to a Volatile Climate

Indigenous peoples in the CHT have to cope with two seasonal dimensions. The first is exposure to extreme weather at certain (and increasingly unpredictable) times of the year (a result of global warming and climate change patterns). The second arises from the cycle of food production and consequent seasonal variation in food availability and prices.

² This is a result of a settlement programme whereby non-indigenous families from the plains areas were brought into the CHT by the Government and given lands that belong to the indigenous Jummas. The current indigenous : non-indigenous ratio is estimated to be 55:45, a variant from 1947 when only 9% of the population of the CHT was non-indigenous.

There are two dry seasons: March-April and October-November. The second dry season is particularly severe for the rural landless because it coincides with the pre-harvest period of low employment opportunities in agriculture. Important progress has been made to reduce intra-year variation in rice production, and to thereby minimize price variation. Income diversification has also led to a general improvement in wellbeing, mitigating the shock and impact of seasonal fluctuations.

During the Community Dialogue, elders identified a number of strategies indigenous communities in the CHT employ to cope with this volatile environment. Taking into account the constraints of the harsh topography, fragile soils, and erratic climate, greater emphasis has been placed on careful selection of land for cultivation, development and demonstration of crops and appropriate cultivation techniques. Of paramount importance is identifying what land can be sustainably adapted to a particular use:

Flat to moderately steep sloping land (0-35 degree slope): This land type is used for annual cash crops like ginger, turmeric, cassava and legumes with intercrops of pigeon pea, sorghum, maize and green manure crops. Selection is based on a management plan that also helps to set the fallow period. Land that has a 35 degree slope is considered suitable for safe cultivation of annual crops, provided that methods of reducing soil-loss are also introduced.

Steep sloping land (35-70 degree slope): This land type sustains some mixed annual cropping if cultivated with tree cover and coupled with soil conservation measures, such as dividing the land with soil contour bio-hedgerows. South, west, and southwest facing slopes should have fruit-tree crops (jackfruit, lemons & limes, guava) which are cheap, easy to obtain and hardy. These crops are planted between contours. North, east, and northeast facing slopes are planted with banana (champa, katholi and anazi), as moisture retention is greater on these slopes during the dry season.

Inter-planting on the slopes: Under normal plantation practices, cover-crops are used to protect the slopes from soil erosion and to increase fertility. As the amount of flat land available to indigenous peoples in the CHT is minimal due to land dispossession and displacement policies and practices, indigenous farmers cultivate cash crops on the slopes using suitable crops and inter-planting. For instance, contoured, double rows of pineapple are planted between trees to prevent and/or reduce soil erosion.

Change in profession: Traditionally, indigenous peoples existed outside the cash economy. Today, an increasing number are running their own small businesses, such as restaurants, or are taking up trades. Some have moved into textile and cottage industries. However, lack of training, experience and capital pose serious ongoing challenges. Even greater challenges exist for remote indigenous communities. In most cases, these villages have accepted fishing and fringe land cultivation³ as their only alternative professions.

4.3 Taboos and Belief Systems Relevant to the Conservation of Forests

Indigenous communities have their own belief systems and taboos connected with *jhumming*. Although there are many 'modern' challenges, these belief systems have existed right up to today in all indigenous communities.

Jhum doosh: *Jhum* cannot be practiced on land that has the following characteristics or conditions (locally this is called *jhum doosh*, or prohibited *jhum*). Four types of caves/ holes can be destructive for *jhum*:

- (i) *toinachua* (a big hole from which water streams flow; sometimes the hole may not be seen, but water flows continuously);
- (ii) *aprangkho* (tunnel cave; it is considered a sanctuary for a specific variety of fish known as *aprang* in Tripura language);
- (iii) *pataalkho* (deep hole; cold wind blows out from such holes); and
- (iv) *tabak khor* (a hole considered a sanctuary for bats).

The belief is that if anyone cultivates *jhum* on lands containing such caves/ holes it is a violation of 'natural law'. For contravention of the natural law, the violator may be punished by God in such a manner that it will cause significant harm or even death to any member of the family. Beliefs or taboos are often conducive to the protection of biodiversity. For a case study example, see the textbox below on *forest management by jhum doosh at Bara Para*.

³ These are lands that are generally submerged but surface when the water level of Kaptai Lake is decreased/falls.

Forest Management by *Jhum Doosh* at Bara Para

Bara Para, a Tripura village in Bhaibonchara Union, is located 12 kms. from the district headquarters. There are 225 families with a total population of 1276. It is not known when the village was established, but it is believed to date back to the pre-colonial period. Despite this long history, villagers are still deprived of basic services, such as health and education.

Traditionally all the indigenous villagers were dependent on *jhum* cultivation. Although the golden era of *jhum* is over, half of the families in the village still practice *jhum* for their livelihoods. Other than *jhum*, the major livelihood activities include plough land cultivation at the foot of the hills, collection of forest products, and casual day labor. *Jhum* has been constrained by different factors, such as increasing population pressures and acquisition of land by the CHT Development Board for rubber plantations. These factors give rise to private property rights over common forests. *Jhum* can no longer provide sufficient food for the villagers, yet they remain dependent on *jhum* for rice production.

For *jhum* cultivation, villagers have certain rules, practices and beliefs. They follow customary rules for selecting *jhum* fields, and perform rituals during the whole process of *jhum* cultivation. Even today there are some restrictions and sanctions followed by the community. For example, one cannot use or cultivate a *jhum* field once it is selected by another family; and all collect forest products, although commercial extraction is restricted.

Jhum is not cultivated everywhere: certain beliefs restrict some sites. One such belief is *jhum doosh*, a prohibition on *jhumming*. It is believed by almost all indigenous communities that *jhum doosh* occurs if there are certain types of holes/caves in the land. It is a sacred sanction for conserving bio-diversity. The following is an example of *jhum doosh*:

Mr. Banendra Tripura, 48, of Bara Para says that his family has been maintaining *jhum* land as 'common forest' for 36 years:

When I was young my father cultivated this *jhum* land. It was not known to my father that the *jhum* was destructive—destructive in that it had invisible holes in the *jhum* field. My father tried to remove the *jhum doosh* by offering duck and goat, the spirits could not be appeased. Finally, an irreparable loss occurred to the family: my nephew died. Since then we have kept the *jhum* field fallow—it is now 36 years.

Mr Banendra says that now the forest has been *beneficial* for them. Villagers can collect trees, bamboos and other products. Due to forest cover, it retains water all year round. Villager can cultivate plough land at the foot of the hills.

Regarding ownership of land, he says that his family socially owns this land, but does not have legal documents. The forest resources are open to all—villagers are allowed to collect bamboo and trees for houses. Concerning the possible threat to protecting this forest, he says that the population is gradually increasing and land is coming under individual possession.

4.4 Village Common Forests

With the beginning of British rule in the Chittagong Hill Tracts in 1860, indigenous peoples lost their right of access to 25 percent of the entire area of the CHT. This was declared 'reserved forest' by the government. Successive governments have also undertaken policies to turn the large forested areas into plough land and homesteads (mainly for the settled communities) and commercial tree plantations. Thus, indigenous communities have progressively lost access to their forests. Against this backdrop, they have devised new methods for sustainable use of forests resources. This innovation was based on their traditional resource management patterns to retain forest cover within the village for long-term use under the leadership of Mouza headmen. Locally this type of forest is called 'village common forests' (VCF). A VCF is managed by the villagers. There are an estimated 110 VCFs across the CHT, with the average size of each VCF varying between 50 and 300 acres.

The following 'benefits' and 'threats', set out in the textbox below, have been extracted from the case study on Kamalchari Mukh Para, Khagrachari Hill District.

Village Common Forests

Benefits

- Collective management of forests by communities.
- Watershed management: water bodies are covered by forest, which retains water all year round.
- Biodiversity conservation: wild birds, animals, and medicinal plants are conserved.
- Source of biomass consumption.
- Social benefits: easy to collect bamboo and trees for construction of houses, schools, temples, pagodas, etc.

Threats

- Collective ownership is not recognized by the government nor the Constitution.
- Population pressure.
- Illegal encroachment by neighboring communities.

5. Recommendations

On the basis of discussion with elders and community leaders at the Community Dialogue, the following recommendations were made for proper management of natural resources in the Chittagong Hill Tracts.

- 1) Respect and recognize the values, beliefs and practices of indigenous communities relevant to natural resource management;
- 2) Document the history of land alienation processes by which indigenous communities have lost control over *jhum* lands;
- 3) Recognize customary laws and indigenous peoples' collective/ community ownership of forests and common resources;
- 4) Provide legal and financial support for community initiatives on natural resource management;
- 5) Raise awareness about the importance of indigenous knowledge for natural resource management;
- 6) Advocate pro-indigenous policies and laws; and
- 7) Strengthen traditional governance system for natural resource management.

Annex. Elders' Stories (Oral Traditions)

Name: Basanta Kumar Tanchangya

Age: 65

Village: Uluchari, Farua, Upazila- Bilaichari

We came here with 14 other families in 1962. Before that we lived in Sakrachari village in Bilaichari Mouza. When the dam was constructed at Kaptai in 1960, cultivable land became scarce, so I then came here to earn a living. Here we were selected as forest villagers by the Forest Department. We had to pay between taka 200 and to 300 to the forest department, based on the number of family members. The Forest Department officer permitted us to do jum cultivation in a specific area. Earlier, it was the responsibility of the village head or elder to distribute *jhum* land among the villagers. Then we started jum cultivation with our traditional process.

We used to plant trees such as Teak, Jarul, Gamari and Chapalish trees in the jum fields. We planted 1,000 to 1,200 saplings per acre, depending on the different geographical situation and condition of the land. Once the tree plantation was completed, we were allowed to sow our jum crops in between the plants on that particular land. The Forest Department paid only 10 taka per acre for planting and for taking care of these plantations each year. We were paid that amount in several installments. Everywhere there was supreme control by the Forest Department. The trees had to be planted maintaining the direction from north to south, east to west. If somebody failed to keep the line straight they were punished, and everyone had to pay 2-3 taka as punishment for harming the trees. At the end of the year, the jum cultivators had to move on to another place as instructed by the Forest Department officers and start jum cultivation by the same process in the new place. But, we also had to go back to the old place to clean the area. They paid us some money, which is nominal. We had to get permission from the Forest Department for any social, religious or cultural festivals. At that time we used to get 1200-1500 kg of paddy. But we paid a donation to the Forest Department out of that. As a result life was not so comfortable. Moreover, we all had to give free labor for site-cleaning, tree care and any kind of natural disasters whenever and whatever else the Forest Department demanded.

In answer to a question on cultural festivals during his childhood, Mr. Tanchangya said: We had different traditional sports competitions and games like Ghila Hara and Nadeng Hara, which are not common any longer. During the *Bizu* festival (New Year), we went out to celebrate and enjoyed all kinds of special dishes and different rice cakes.’

Name: Ruichan Marma

Age: 70

Village: Alikgong, Farua, Upazila- Bilaichari

I was born in Balukhali Mauza of Rangamati Hill District. We moved to Bilaichari due to poverty and lack of employment and livelihoods. A Chakma family gave us shelter. I paid 200 taka to the Forest Department to be a forest ranger in the Raingkhong forest area. I played the role of headman for Raingkhing Reserve forest area for over 38 years. Recently, I handed over my responsibility to some one else. Mr Huloram Headman came to this forest area with other families. He created 40 acres of teak forest by his own efforts. We, indigenous people, were the initiators of this forest but have been paid nominal payments. We have no rights to the reserve forest⁴ and no land.

Name: Kanayaa Tanchangya

Age: 90

Village: Uluchari, Farua, Upazila- Bilaichari

My birth place is Sakrachari village. My grandfather came here to Uluchari most likely from nearby Rangamati town. When he came to Uluchari from Sakrachari I was only 5. We had been living here in the forest area by permission of the Forest Authority. Once upon a time there was dense forest in this area. At that time there were various kinds of trees and different types of medicinal plants. Nowadays, after the plantation of teak trees - which are alien to the CHT - many other kinds of species have been lost from these forests. We had to take care of teak plantation for up to five years after planting the saplings. The Forest Department paid us a nominal amount to do this. They always instructed us to maintain a straight line while planting the teak saplings, if anybody failed to do that he was punished.

⁴ Reserve forests are state forests, and indigenous peoples are prohibited from entering, using or managing the natural resources and lands therein.

As a result of the teak plantation⁵, many wild animals are now lost from these forests. Animals left the forest as they faced food scarcity. In earlier times, when we controlled and managed the forests, there were many species of big trees like Garjan, Haritaki, Aamalaki, Boragulo, etc. which are natural to our forests, we saw many wild animals in the forests. These species have vanished from the CHT forest, and are all lost to us now.

I also remember there was an earthquake, during that time. We were all safe as we could read the signs and take shelter. I recall there were black clouds all around the sky, the animals were running to and fro with fear, there was a strong wind, and it started to rain. We understood all this to mean a natural disaster was imminent. So we hid in a cave. Many trees fell down but everyone was safe.

Name: Shakre Prue Marma

Age: 92

Village: Chicha Para, Farua, Upazila- Bilaichari

My ancestors were at Dulupara in Bandarban. Nearly 80 families had to be evicted from their own lands due to a land conflict with the Bo Mong chief (the chief of Bo Mong circle). We had to take shelter in the jungle. They had to move from that place also, so some of them went to Myanmar and another group to Kaptai and Shilchari. After some time my family moved to Kegrachri from Shilchari.

In 1962 we entered the Alikhong Reserve Forest as forest rangers by paying 250 taka to the Forest Department. We could earn 10 to 15 taka by planting 1000-1200 teak trees on an acre of land. On the other hand, the Forest Department engaged us for various purposes in the forest at a nominal rate. We were not allowed to use any forest products, not even the scattered twigs and branches for cooking. The Forest Department deprived us of our rights by doing this. The place where we have been living for ages is not ours. We have no rights to the forest products. The Forest Department can displace us whenever they want.

⁵ There are concerns that teak plantations may be susceptible to serious pest attacks, excessive erosion and soil depletion. It also does not lead to an improved fallow system.

Name: Ram Khub Lal Pangkua

Age: 75

Village: Pangkua Para, Bilaichari

I have been living in this village for the last thirty years. Before, I lived in Dumdummaya Mauza. We came here, to Pangkua Para, with some families from Dumdummaya in 1979. I started jum cultivation when I was an adolescent. At that time we used to select a suitable place for jum cultivation by first going to check out different places. Our decision used to be based on the fertility and potential yield of the jum field. We can gauge the fertility of the land by observing some signs drawn from the condition of the soil. Once it is selected, we place a sign on the field, so others can know that this is our preferred jhum site. We also analyze our dreams, the night before the final selection of the jum fields. If we dream about clean, clear water we believe this to be a sign of a good harvest. However, if we dream about dirty water and dried up springs, these are bad omens. In addition, the Tripura consider it a bad sign when they dream of dried meat and the head of a Goayal (small bison).

When we cleared the jum fields, we would leave the big trees standing. We would also pray to some of the big trees, like banyan trees, for good fortune. After clearing the jum fields we planted the seeds using a dipper, and mixing up different crops with rice. After a few days we have a ceremony and sacrifice a rooster, a hen and other animals to the spirits. The Pangkua community called this ceremony Lawthekungjung. It is offered to ensure friendship and harmony between nature and soil, and to avoid harm to the different types of paddy, cotton and vegetable that are sown in the jum fields.

The jum cycle is now for four to five years. After the harvest, we offer a chicken to the goddess; the ceremony is conducted by a female elder. Many people are invited to a celebratory feast of thanksgiving when the harvest is in. The length of jum cycle has decreased in recent times due to scarcity of lands and the high growth of population.

Marriage System: I got married according to my parents' decision. During my youth, men and women were not allowed to meet or get to know each other prior to marriage. When the bridegroom's family chose someone as a possible bride, the father or guardian of the

bridegroom would go to the bride's family to make a formal proposal. He would take gifts, and a mandatory bottle of rice wine. A return gift of rice wine meant the bride's family was agreeable, and accepted the offer of marriage. During the wedding ceremony, the groom's family had to give the bride a minimum of 30 silver coins. A pot of wine was kept in front of the bride and groom, and while the mantras (a mystic word or words recited in prayer to god or to a deity) were being chanted, they had to drink some of the wine through a narrow bamboo pipe. When the ceremony was completed, it was the tradition to introduce the new couple to the family and the elders, and to ask for their blessings for a happy and fruitful union. When this was done, the guests would all sit down to a festive meal of pork, Goayal meat and other special dishes. There would also be lots of rice wine, and it was a merry occasion.

Name: Lungle Pangkua

Age: 65

Village: Pangkuapara, Bilaichari

Our old place was in Dumdummaya, Jurachari, before we came here to Pangkuapara, Bialichari. We were devotees of the god Siv (a Hindu Deity) before we converted to Christianity. At that time we preserved a village common forest (VCF) covering an area of two acres adjacent to our village. Nobody could collect any trees or bamboo from the VCF. No one was even allowed to hunt in that specific area without consent from the villagers and elders. We preserved those forests to keep the spring water fresh. We could also collect many herbal and medicinal plants from the forest. As a general rule, each village decides how much of the forest area should be demarcated as VCFs.

The forest products were used for different social and religious functions. We hunted with a traditional trap called kabuk. There were some basic principles of hunting, and nobody hunted beyond their needs. At that time we needed only to buy salt from the market. We were self-sufficient and obtained all other necessities from nature. Our women weave all the clothes and blankets for the family. Nowadays, we have to buy the yarn from the

market; in earlier times, this was made from cotton grown on the jhums, and the CHT was famous for its cotton.⁶

Name: Nihar Bindu Chakma

Age: 79

Village: Headman, 54 No Tarabonnaya Mauza, Dighinala, Khagrachari

“A jum cultivator has the right to do jum cultivation everywhere and this is his birth right”.

Mr. NB Chakma reiterated the traditional custom, that an indigenous farmer can do jum anywhere in the CHT, provided he follows set rules and regulations governing this practice. He then proceeded to explain further:

The traditional system of jum cultivation: I first learned jum cultivation at the age of thirteen. The total system of jum cultivation is full of adventure which cannot be explained in a nut shell. We produced everything we needed on the jum, it provided us with all our essential needs. There was only one commodity we had to purchase from the market – salt, and also some tools that we could not make ourselves, e.g. axes, hoes, knives (tagal) etc. We used the oil of the Garjan tree (a big tree found in CHT forests) to light our homes at night.

At that time we did not need to buy any clothes from the market. Our women made all our clothes for us. They collected the cotton from the jum field and would spin it on a spinning wheel at home. They could also dye the yarn by using natural dyes made from collecting different saps, leaves and barks from the forest. Every indigenous household had its own little textile system made of back-strap looms. Chakma women those days used to only wear Pinon and Hadi (the traditional red and black-blue skirt with richly patterned shawl) and a typical headwear called a khobong. Men dress in a jum shirt made from home-spun yarn.

Often the jum fields are quite far away from the village, some 2-3 hours walk in some cases. During the harvest season, the entire family moves to the jum and stays at a little house on

⁶ The CHT was known as the ‘kapas mahal’ for its cotton in the 19th century.

stilts called a tong gor, right on the jum field. This way the family saves time traveling, and can look after the jum and crops better - to weed, chase away any birds and animals from eating and otherwise destroying the crop, harvest any vegetables that are ripe, and other such tasks.

Sometimes, it is difficult for the jum cultivators to complete all the essential processes in due time alone. For this kind of situation, we have a custom called Malaya. The jum cultivator/family calls for help and as per our custom the entire village offers them one day's work. You can also 'call a Malaya' to build a house, put up a roof, or to complete other such tasks that are difficult for a couple or a family to complete alone. In return, as an expression of thanks, it is the obligation of the host to prepare a feast for the entire village with all kinds of special dishes such as pork, chicken etc. Usually, the villages bring their own rice wrapped in banana leaves with them, so it is not too burdensome for the host. The meal is often accompanied by different kinds of rice-wine. We all celebrate and share the well-earned feast together, after a hard days work.

Another very good custom we practice is when a woman has a baby. The neighbors and relatives all take turns and send food to the new mother. It is believed that after having all the different dishes, from the different households, the new mother will regain her energy quickly. This also shares out the burden of providing nutritious foods such as chicken etc., amongst the community, important for us, as we are often poor and cannot prepare chicken, and other such items on a daily basis. In this way, the whole community can carry out its social responsibility for the new child and mother. Unfortunately, this 'good practice' is dying out in some areas.

Social jurisdiction: A Mauza consists of several villages. The Karbari, who is the head of a village, was responsible for carrying out any type of social jurisdiction in the village. The Mauza head had the same responsibility for the whole Mauza. If anyone was not satisfied with the judgment of these courts they could appeal to the Raj Court. We follow this system to this day. The Raj Court is the supreme authority.

Natural resource management: Indigenous communities used to plant bamboos on both sides of the stream to protect the sides from erosion. They preserved a Village Common Forest (VCF) near the villages. But today it is difficult for us to protect the natural resources due to increased population, which has affected the carrying capacity of the land and the forests. This tremendous increase in population (450,000 settlers in the 1980s) has impacted adversely on our subsistence and dependency on the forests for our livelihood.

Festivals: Our main festival is the Buddhist New Year (Bizu). This is celebrated with many colorful events three days in a row - the Phul Biju, Mul Biju and Gajjaya Pajjaya Day. Thanmana Puja is another big festival of the Chakma community. We offer our thanks and appreciation to the River by sacrificing an animal e.g. a goat, a chicken, etc.

Name: Sur Banu Tanchngya

Age: 75

Village: Uluchari, Bilaichari

One day, my father, the late Rasik Chandra, found hidden treasure. Soon after, our family members started to die, one after another. First to die was my mother, then my uncle and aunt, and then my sister. Only my father, my two sisters and I survived. We believe that with this sudden wealth, you have to lose something else.

I learned how to spin cotton and weave clothes at the age of ten. I could make a Pinon and khadi from that time on. As my father was a wealthy man, I did not have to work on the fields. I loved to go and catch fish and crabs from the little rivulets and springs near our house. This was an occasion for the entire family and neighbors to enjoy together. The rivers and streams were full of fish at that time so we were able to catch a lot very easily. In those days, women had to cover their heads with a khobong as it was considered a bad omen to see the women's hair.

I got married at the age of thirteen, and at our wedding feast, my father arranged a play to entertain the guests; this was a rare treat. I received many ornaments from the bridegroom's family. After we were married, I lived with my in-laws and had to learn how to do everything. I had to work hard every day, even in the fields – which I was not used to.

Usually it is the women who harvest the rice, the men carry it to the farm-houses and we then complete the other steps such as winnowing etc.

The Bizu festival: The Buddhist New Year festival is the most important festival for us. The children decorate their houses on the first day of the Bizu festival, called Phul Bizu, and you decorate the house with lots of colorful flowers and sometimes even special plants to ward off the evil spirits. They also offer flowers to the river goddess to ensure prosperity for the family and society. Early in the morning on the second day, New Year's Eve, the children go from one house to the next, to pay their respects to their elders. Everyone has to do this. We make various kinds of fragrant rice cakes, delicious sweets and savouries, and drink lots of rice wine and beer. We have to make a special dish from at least seven kinds of vegetable – bitter, sweet and sour – to symbolize all the bitterness and sorrow that we have suffered during the course of the year. The third day - Gajjya Pajjya - is the first day of the New Year. We fetching water from the river and streams and bathe our elders. This day is for resting, after two full days of merry-making and festivities. Every household cooks its best dishes, and family and guests gather to share the meal. We also go to the temple in the evening to pray for a healthy and prosperous new year.

Name: Jhimit Jhimit Chakma

Age: 49

(Teacher at Monaghar Residential School)

Village: Rangapani, Rangamati Sadar

I was born in 1958 in Taulaban village of Baghaichari Upazial, Rangamati Hill District. This village is now under water, submerged by the Kaptai Lake. We moved to a new village, also named Taulaban as most of the villagers were from the old village like us.

Our family was a big joint family consisting of 32 members. Considering the large size of our family, we used to divide into two groups for cultivation purposes. Some were involved in jum cultivation while others were engaged in paddy land cultivation. In fact, there were only three types of livelihoods at that time: jum cultivation, plain/paddy land cultivation and small business.

My grandfather was an expert on traditional medical system; he was known as a Boidyo (shaman). He was the only person in the village who could identify all types of medicinal plants. He would prepare all kinds of cures by collecting and mixing many plants that had excellent medicinal value. He had remedies to treat many critical diseases, and was well known for his indigenous scientific knowledge.

Jum cultivation: The jum cultivators carry a basket on their back, called a khallong, when they go to work on the jum. At the jum house (called a Tong gor), we live very simply, and cook in bamboos. We use dried pumpkin gourds and bamboo tubes to store salt, dried fish, turmeric, ginger etc.

Biodiversity: Household waste is used as a fertilizer for the trees and plants near the house. The root of the bean creeper helps to protect against soil erosion; it strengthens the soil around it. The springs were the only sources of clean drinking water in the old days. We used to make sure the trees were planted at a distance of 4 to 5 meters away from the banks of the spring to keep the water fresh and pure. This system also protects the banks of the spring from erosion. Indigenous knowledge was also applied in constructing houses. We do not need to dig a big hole to build a jum house. Therefore, it was possible to retain the natural structure of the soil. It is environmentally friendly. Now we make houses by digging many big holes, and as a result we now face soil erosion and environmental degradation.

It was also mandatory to preserve a village common forest (VCF) near the village for our medicinal and other needs. It is essential to maintain 25 percent forest to maintain a healthy natural environment that is eco-friendly and sustainable. But at present we have less than 25% forest cover. The Forest Department insisted we plant teak trees. Teak is a mono-crop; other plants cannot survive in its vicinity. This has done great damage to the environment. Trees and animals were collected from the forest without any justification, and we now have to face the consequences. Because of this man-induced disaster we now have the rains coming later and later, and for less time, and a harsher winter.

Name: Niranjan Chakma

Age: 65

Village: Bilaichari Mon, Bilaichari

Our village is an old village dating back to the British period. Our progenitors were jum cultivators, and we still follow that culture. As jum is our only livelihood, we always try to keep our ancestral lands well protected and preserved. After the preparation of the jum field we used to plant ginger, chili, eggplant, corn, cotton, lady-finger, turmeric, maize, papaya, etc, along with the rice. The undermining of jum by having a single cash crop, such as teak and rubber, has deleterious effects on the cultivator's nutritional status and livelihood, as the inter-cropping in jum traditionally yields a wide range of crops that ensure a nutritionally balanced diet.

We worship and make offerings to propitiate the goddess at each stage of cultivation to ensure good production. We believe that the blessings of the spirits are the key factors for good harvests. After the harvesting is completed, we always invite the village elders to lunch, so they can give us their blessings for a prosperous future.

Name: Milonghi Chakma

Age: 95

Village: Bilaichari Mon, Bilaichari

I have been living here since I was born. There was dense forest all around at that time. The forest is decreasing day-by-day. I also think people are getting lazier. In those early days we could make clothes from jum cotton. Now we get everything from the market. We were involved in house work as well as in the jum fields.

Jum cultivation, according to the traditional method, uses secondary growth forest of about three or four acres, cleared in the middle of winter. After slashing and burning the jum field in the spring, we would start planting seeds with the onset of the rains. But nowadays jum cultivation is criticized as primitive, unproductive, and blamed as causing deforestation and soil erosion. Yes, irresponsible jum cultivation can be ecologically and economically unviable in the long run. But if we follow the traditional system it can never be a harmful practice. Jum cultivation uses the natural watershed from the mountains to nourish and sustain the

rice and other plants. In jum cultivation, we do not need dams or other environmentally degrading irrigation systems. It is all natural.

In jum cultivation the ash produced from the initial burning acts as both a natural fertilizer and a pesticide. Food produced in the jum field is disease-free, naturally grown, and free from the residue of dangerous pesticides. The most important thing is that, after the crops are harvested, the jum needs to be left fallow for five or six years to regain its fertility before the next cultivation cycle begins. We call the 'abandoned' jum ranya and it becomes a feeding ground and sanctuary for wild animals, birds and insects. At the same time, the cropping and diversity of indigenous jum agriculture secures the land from the ecological destruction caused by monoculture.

Name: Kuntimala Tripura

Age: 60

Village: Bara para, Bhaibonchara

Ms. K Tripura has lived in this village since the time of her ancestors. She is now 60 years old. Since her childhood she has been involved with jum, and used to help her parents. She received all her knowledge from her elders. About 40-50 years ago, all types of crops were cultivated and production was very good as the fallow period was 10-15 years. This long fallow period allows plants to grow back, and the soil becomes more productive. When comparing it with the present situation, there is such a negative difference. The fallow period is only 2-3 years; soil fertility is reduced, so production also diminishes each year.

The two months of Poush-Magh (mid-December to mid-February) are the best for the selection of the jum site. Farmers collect a little bit of soil from any fallow land that may be a potential jum site, and divide it into two portions: the first portion they place at the jum site, and the second they bring home and keep it under their pillow. They pray for good dreams. If they have a bad dream, this means that this particular jum site should not be cultivated. They make offerings to the spirits. A good dream means the farmer has selected the right site. After jum site selection, the indigenous farmer burns the area. Once this is done, they sow different types of seed using a dibber.

The family of Kuntimala cultivates land that they received by way of inheritance. If the land is difficult to cultivate (jum dosh), then they can request help from their neighbors or relatives. Various types of paddy, such as gelung, company and binni, are the main crops cultivated. Moreover, cotton was also cultivated because of the very fertile land. But now, due to the short fallow period, the fertility of the land has decreased and production has dropped-off. At the present time, turmeric and banana have taken the place of those crops. There is no technical system for irrigation: it depends completely on rainfall and natural precipitation. Nowadays, over-population is the main cause for declining production. Jum cultivation no longer supplies all that is needed for the family, so now they also cultivate some rice on paddy (flat) lands.

Name: Denabandhu Tripura

Age: 60

Village: Bara Para

D. Tripura has been cultivating jum since childhood. He also teaches this to the younger generation.

His family preserves seeds for jum crop cultivation. Rice and other seeds from previous crops are not lost; if someone has not preserve the seeds, someone else will have done so. DT grows various kinds of vegetables on his jum land. The volume of crop production is not as good as before, is due to the government's policy of establishing rubber and segun/teak plantations in the name of 'forestry'. This has destroyed the area available for jum cultivation, as well as the beautiful natural forest that was the mainstay of the indigenous jummas in the CHT. At the same time, the fallow cycle is shorter, and they have to cultivate jum in 2-3 year intervals; consequently, soil fertility has decreased.

Generally the Headman determines the jum plot after receiving taxes from the indigenous farmers. Denabandhu makes a garden in the jum field by planting trees, bamboo, and a mix of fruits after harvesting the paddy. If there are many large trees at the jum site, crop production increases. He too endorses the traditional belief of dreams to indicate the suitability of possible jum sites. As an example of jum doosh, more than 30 years ago, a child died because the family insisting on cultivating a specific jum despite knowing this was

not a 'good' site. Since then nobody from the village cultivates jum at that place. At present the place is filled with dense forest.

Name: Krishna Kishor Tripura

Age: 32

Village: Bara Para

Krishna Kishor lives at mile 9, Bara Para village. He has two daughters. He started jum cultivation at the age of 15 or 16 alongside his father. The villagers of Bara Para have been cultivating jum for generations. If someone does not possess their own jum land they can cultivate jum in another place by getting permission from the original land owner. Since getting married in 2001 he has been cultivating jum separately from his father's family. The land Krishna Kishor uses for jum cultivation belongs to his neighbors; he cultivates the jum once a year, with the help of his wife. After cutting and setting fire to the site, they clean the rest of the site, plant the seeds, and clear out the weeds. The weeds need to be cleared within one month of planting seeds, and also during the jum cycle.

There are some differences in jum cultivation today compared to before. One difference is that the types of paddy seeds used in the past are not available, they are lost to the indigenous Jummas. At present he grows seeds such as gallon, company, binni and bopai, mostly new and unfamiliar plants. Prior to cultivation, he does not know which types of seeds will grow best. He has to find out by first cultivating, then only does he know which type of rice grows best. He also plants the seeds based on the experience of other jummas, who advise him on which seeds yield a good crop.

However, a family cannot survive any more on jum alone. Since 2003-04, after participating in a sustainable development program, he has been working on a fruit garden. He borrowed money from Zabarang Kalyan Samity, an indigenous organization based in Khagrachari, to start it off. He also got some plants from them, and bought others using his pension funds. There are three groups of people, each comprising 10 members that have benefited from this financial assistance from ZKS in his village. His fruit orchard is a big success. It is on four acres of land in total, and he now owns some of this land. He grows

lychee, banana, orange, jackfruit, segun, and gamari on his land. His wife looks after the fruit garden so that the cows and goats do not enter and destroy the plants.

Krishna Kishor has been advising others in his village to also have orchards, as cultivating jum is no longer enough to maintain a family. He suggests that they can use his success as inspiration. According to him, technical assistance is essential but financial help is not so necessary, because in some cases it makes people lazy.

Krishna Kishor wants his two daughters to have a good education; he does not believe they should work on a jum. He tries to save 25% of his total income for his children's education. He also plans to buy some land in Khagrachari town, so his children can stay there and attend school and college there.

This is his dream.