Social Impact Assessment report on Land Acquisition for the Purpose of Setting up an Entry Point at 18th Mile, Ri Bhoi District, Meghalaya

SUMMARY OF THE REPORT

A Social Impact Assessment study was conducted by the Meghalaya Institute of Governance with regards to acquisition of land at 18th Mile Umdoh village measuring 60697.97 sq. m or 14.999. The purpose for the land acquisition is to establish an Integrated Facilitation Centre - Entry Point to facilitate the entry of vehicles and people into Meghalaya.

The village of Umdoh is a medium size village with a total of 147 households. It has a mix community with people belonging to the Khasi, Garo, War-Jaintia as well as other communities. It falls under Umling C&RD Block of Ri Bhoi District.

It is approximately 15 kms from the District Headquarter of Nongpoh and approximately 29 kms from the Assam – Meghalaya state border. The land to be acquired may be classified as hilly terrain. It is arable land. This proposed project site is on the NH -40.

The land is owned by Shri Jried There 5 Khongjoh. are residential structures occupied by him and his family members which will be demolished once the land is acquired. There are seven families whose income is dependent on the area to be acquired. The land is cultivated by his children and two other household who rent the land to grow crops. On this land a number of vegetables and fruits are grown including beetle nut, beetle leaf, pineapple, jackfruit, pepper, banana and other fruits. Apart from this there is one



chicken coop and one car wash at the foothill which will be demolished once the land is acquired.

Adjacent to the land is Anganwadi centre as well as a village footpath constructed under the MGNREGA scheme. There is also a nonfunctioning water pump and two water sources.

During the Key Informant Interviews conducted with the landowner and his children (PAP) it was recorded that they were willing to part with the land only on the condition that they would not have to enrol themselves for an Aadhar number which is against their sentiments. However, during the Public Hearing, the children of Shri Jried Khongjoh opposed to the land acquisition as they have no other land.

On the 20th of March 2018, a Public Hearing was held at 18th Mile Umdoh village chaired by Shri Aiban Swer OSD MIG. It was attended by 129 people. During the Public Hearing a representative from the Office of the Sordar Nongpoh Elaka requested that prior information should be given to the Elaka before holding any other Public Hearing. He enquired about the shift of site from 19th mile to 18th mile when the project site at 19th Mile had been accepted by the public. While another participant informed about the water sources that were present on the area to be acquired which needs to be protected as they provide water to the neighbouring villages also. The Secretary of Umdoh village submitted to the OSD, MIG a letter with conditions for setting up the Integrated Facilitation Centre – Entry Point at 18th Mile. Community members



who spoke during the day accepted the proposed project. The land owner too accepted the project, while his children who are occupants of the land were opposed to the land acquisition as they have no other land.

The Social Impact Management Plan prepared for this project provides for the replacement of lost residential structure through the Indira Awaz Yojana Schme to the 5 HHs who will lose their houses. It also provides for compensatory afforestation and the protection of water sources.

SOCIAL IMPACT MANAGEMENT PLAN

The Meghalaya Institute of Governance which is the state nodal SIA unit is pleased to present herewith the Social Impact Mitigation Plan which has been prepared to mitigate negative social impacts that may arise out of the proposed land acquisition to establish an Integrated Facilitation Centre – Entry Point according to the RFCTLAAR Act, 2013. The SIMP consists of a set of mitigation, monitoring and institutional measures to be taken during the design, construction and implementation phases of the project to reduce adverse social impacts during the various stages of the project.

SUMMARY OF FINDINGS

The area proposed to be acquired is a hill

- The area proposed to be acquired is agricultural land
- The area proposed to be acquired belongs to only one land owner
- There are 7 families whose income is dependent on the area proposed to be acquired.
- There are 5 residential structures on the land proposed to be acquired that will have to be demolished once the land is acquired.
- There is 1 chicken coop on the land proposed to be acquired that will have to be demolished once the land is acquired.
- There is 1 car wash on the North Western foothill of the land proposed to be acquired that will be disturbed during the land acquisition process.
- There is a community footpath on the edge/boundary of the land proposed to be acquired
- There is a non-functioning water pump on the land proposed to be acquired.
- There is an Anganwadi centre bordering the land proposed to be acquired.
- There are 2 water sources near the land proposed to be acquired.
- The land owner and his extended family (who are users of the land) are willing to give the land on the condition that they do not have to enrol themselves for the Aadhar card.

- The land owner request for employment opportunities is given to his family members once the project is in operation.
- The land owner is willing to cede with his land.
- The directly affected persons from this land acquisition were opposed to the land acquisition and requested that the site for the Entry Point be shifted elsewhere

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Type of Impact	Negative	Positive
Agriculture	Loss of agricultural land and products	Nil
Livelihoods	Loss of livelihoods for agriculturalists and the owner of the car wash.	 i. Possibility of gaining employment in the project to be installed. ii. Possibility of gaining income through small enterprises/petty shops set up near the project site.
Trees	Loss of plantation trees.	iii. Planting of trees in the project site to negate the air pollution from the traffic.
Structure	There will be a loss of 5 residential structures. There may be some disturbance to structures present near the project site such as the Anganwadi Centre.	Nil
Water	Disturbance to the two sources of water near the land proposed to be acquired.	Better access to PHE water for the village as a whole.
Electricity supply	Nil	Nil
Health	Nil	Nil
Road	Disturbance to NH-44 during construction period	Nil
Miscellaneous	There is some concern regarding the enrolment for Aadhar number.	

MEASURES TO AVOID, MITIGATE AND COMPENSATE IMPACT RESETTLEMENT MEASURES

- As per Section 8 of the RTFCLARR Act 2013 the Rehabilitation Commissioner shall publish the approved Rehabilitation and Resettlement Scheme by affixing it in conspicuous places in the affected areas.
- As there will be 5 households whose residential structures will be demolished during the construction of the project, proper resettlement plans need to be put in place.
- iii. As per Section 101 of the RFCTLARR Act 2013 when any land acquired under the Act remains unutilised for a period of five years, it shall be returned to the legal owners or the legal heirs.
- iv. As per Section 41 (6) as the land shall be acquired from a Scheduled Tribe family, one-third of the compensation amount due should be paid to the affected family as first instalment. This would be extremely useful to help these families who will lose their residential structures to construct another residential structure.
- Replacement of lost residences by giving affected households a constructed house as per the Indira Awas Yojana scheme or the equivalent cost of a house may be offered in lieu of the constructed house. Each affected family will not get more than one house under the provisions of this Act.

REHABILITATION MEASURES

- i. Even though this is a tribal dominated area there is no need to put forth a Development Plan for Scheduled Tribe families as per Section 9 of the RFCTLARR Act 2013 by the Requiring Body as it does not involve involuntary displacement of the tribal families.
- ii. Shri Jreid Khongjoh the legal land owner of the land may be compensated as per the First Schedule of the RFCTLARR Act 2013. This may include the:
 - Market Value of land as determined under Section 26
 - Factor by which the market value is to be multiplied in rural areas
 - The value of assets attached to the property.
 - Solatium, i.e. an award for inconvenience, loss or the like.
- iii. The Second Schedule of the Act is applicable to all affected families and compensation may be paid as per it.
- iv. If any affected household has been reduced to the status of a marginal farmer on landless, they shall be allotted a minimum one acre of land in the command area.
- v. When jobs are created through the project, suitable training and skill development should be given so as to ensure employment at a rate not lower than the minimum wages; or;

- vi. One-time payment of five lakhs per affected families or Annuity policies that shall pay not less than two thousand rupees per month per family for 20 years.
- vii. Each affected families should be given monthly subsistence allowance for a period of one year. As they are ST displace from schedule area, another fifty thousand rupees is to be paid.
- viii. Each affected families shall be given a onetime financial assistance for transportation cost. They shall also be granted a one-time resettlement allowance.
 - ix. The family who has a chicken coop on the project site shall get a onetime financial assistance for the coop.

SOCIAL MEASURES

i. The affected families should be resettled preferably in the same Scheduled Area in a compact block so that they may retain their ethnic, linguistic and cultural identity (Section 41 (7) of RFCTLARR Act, 2013)

ENVIRONMENTAL MEASURES

- Under the Forest (Conservation) Act, 1980 Chapter 3 Section compensatory afforestation must be made for the loss of all trees in the area.
- Trees to be planted to reduce the pollution caused during construction and implementation of the project.
 - iii. Protection of the water sources at the project site so as to protect it from

pollution during the construction period and thereby enable its use during the operation phase of the project.

MISCELLANEOUS

- i. Any disputes between the stakeholders regarding land ownership should be resolved first and made sure compensation is given to the legal owner.
- ii. Adequate measures should be placed to address unforeseen negative impacts. Institutional like measures proper Grievance Redress Mechanism (GRM) cell may be installed and a notified Grievance Redress Officer (GRO)
- iii. It is highly recommended that the desire of the community be taken into consideration their written representation followed.

Rehabilitation and Resettlement Committee Although Section 45(1) of the RFCTLARR Act 2013 puts provision for the establishment of a Resettlement and Rehabilitation Committee only when the area of land to be acquired is more than one hundred acres, it may be suitable to constitute a similar body to see and review and monitor the progress of rehabilitation and resettlement once in a month till the process of rehabilitation and resettlement is completed. This Committee is also set up for the purposed of carrying the postimplementation social audits and grievance redress.

Social Impact Assessment report on Additional Land Acquisition for The Construction of Border Outpost at Dulainala, East Khasi Hills District, Meghalaya

SUMMARY OF THE REPORT

The Meghalaya Institute of Governance was assigned the task of conducting a Social Impact Assessment study on the proposed additional land acquisition at Dulainala Border Outpost, East Khasi Hills District Meghalaya. The area to be acquired measures approximately 6284.39 Sq. m belongs to an individual landowner, Smt. Baphiralin Kharrngi,

The objective of the project is to upgrade the existing BOP to a new Composite BOP. These Composite BOPs would include better facilities for the BSF personnel stationed there. As for Dulainala BOP, the additional land will be acquired for upgrading it to a Composite BOP.

From the desk survey carried on by the SIA Unit it was seen that the intention of the Ministry of Home Affairs to upgrade the BOP to a Composite BOP, so that the new BOP would have more facilities within it which would improve the standard of living for BSF personnel stationed at the borders.

From the preliminary site visit, it may be said that the area can be classified as cultivable sloping foothill having small thicket and matured trees which has remained unutilised over the past years. There are no activities nor are there any settlements in the proposed project site.

The SIA Unit of the Meghalaya Institute of Governance which had conducted site visits to the area proposed to be acquired had also conducted Key Informant Interviews with the officials of



BSF BOP Dulainala, and the landowner. The SIA Unit also had interactions with the headman of Dholaimalai village and the Hima Malai Syiemship. From these interactions, it was found that the area was uninhabited and had no activities on it.

The initial screening of project impacts showed no impacts from the land acquisition. A Public Hearing was held on the 25th April, 2018 in Dholai village, East Khasi Hills District. The hearing was chaired by Shri. A.B.S Swer, OSD, Meghalaya Institute of Governance, along with the SIA Team in the presence of Shri. B. Pale, Revenue officials from Deputy Administration East Khasi Hills District, Shillong; Shri. Arvind Kumar, Commandant, BSF BOP Dulainala; Shri. F. Sohmat, Syiem of Hima Malai; Shri. J. Momin. headman of Dholai and community members from Dholaimalai. The hearing was attended by participants from Dholaimalai village, with 13 female participants and 22 male participants. The participants in the public hearing from Dholai village opined that the setting up of a BOP would increase their safety and protect them from intrusions/incidents from across the border. There were no objections to the proposed land acquisition construction of the BOP at the conclusion of the public hearing.

SOCIAL IMPACT MANAGEMENT PLAN

The Meghalaya Institute of Governance which is the state nodal SIA unit is pleased to present herewith the Social Impact Management Plan which has been prepared to mitigate negative social impacts that may arise out of the proposed land acquisition to establish a Border Outpost at Dulainala, East Khasi Hills according to the RFCTLAAR Act, 2013. The SIMP consists of a set of mitigation, monitoring and institutional measures to be taken during the design, construction and implementation phases of the project to reduce adverse social impacts during the various stages of the project.

Summary of the Major Findings

- The land belongs to an individual land Smt Baphiralin Kharrngi, owner, resident of Nongkrem, East Khasi Hills.
- The land to be acquired is a cultivable sloping foothill having small thicket and matured trees which has remained unutilised over the past years
- There are no residential, commercial and agricultural usages of the land to be acquired.
- livelihood There no income generation from this land to be acquired so it will not affect the livelihood income of the landowner.
- Community members of Dulainala do not utilise the land for any purpose.

- There is no negative impact from this land acquisition on livelihood, common property resources, farm assets, health service, educational institutions, public utilities, vulnerable groups, religious and cultural site, recreational area, entertainment area, market place, etc
- During the Construction Phase: If any kind of excavation or destruction takes place, soil and concrete generated from the construction site should not be dump near the stream (wah doloi) or near the paddy field.
- During the Operation Phase: It will have a positive impact on the safety and security of the local people.
- Acquisition of land for Dulainala Border Outpost will improve the Border Outpost station facilities.

Rehabilitation and Resettlement Measures

- Does not arise
- Measures to Mitigate and Compensate
- The landowners would be required to be compensated as per Schedule I of the Right to Fair Compensation Transparency in Land Acquisition, Resettlement and Rehabilitation Act. 2013.
- Each type of loss will be calculated as per the provision made in the RFCT in LARR Act-2013.

- The District Collector/ Deputy Commissioner shall assess and determine the market value of the land
- Compensation for the trees will be based on their full replacement cost. The District Collector/ Deputy Commissioner shall assess and determine the value of trees and plants attached to the land acquired and use the service of experienced person in the field of agriculture, forestry or any other filed. may be considered as necessary.
- Mitigation measure for Project Phase:
- Pre-Construction phase: Since the proposed land acquisition is near the stream (wah dolai) measure should be taken to check on seasonal flooding to avoid any kind destruction.
- Construction phase: Soil dumping from excavation and concrete destruction should be disposed off at proper area away from the stream and paddy field. Maintenance and reconstruction of the existing Border road should be taken up.
- Operation phase: No negative impact after construction phase. It will further improve security and safety of the local people.
- Adequate measures should be placed to address unforeseen negative impacts. Institutional measures like proper Grievance Redress Mechanism (GRM) cell may be installed and a Grievance Redress Officer (GRO) notified.

Social Impact Assessment report on Land Acquisition for Establishing a Fire Service Station Mawryngkneng, East Hills Khasi District, Meghalaya

SUMMARY OF THE REPORT

Land acquisition to set up an emergency fire station is proposed at Mawryngkneng village. Besides Mawryngkneng, the proposed fire station would serve neighbouring areas that have no immediate access to a fire station.

The land proposed to be acquired belongs to one individual Smt. S. Lawai, a farmer who, until the receipt of the notification informing of the intention to acquire her land, grew oranges and other vegetables in that land. The land may be classified as flat-arable land. It is located along NH- 44 (Shillong to Jowai). From the preliminary site visit it was deemed that the land acquisition and construction of the Fire Service Station impacts would have little surrounding area. The construction phase of the project may disturb the adjacent land belonging to the Church of God, and the latrine of Smt. S. Rynjah whose property is adjacent to it. Apart from this, it may affect connectivity of that habitation in Mawryngkneng village as a village

metalled road is on the left of the proposed land to be acquired.

During the team's interaction with the landowner, it was learned that the she was eagerly awaiting the acquisition of the land as she and her household had witnessed immense loss as the land would provide approximately Rupees Three Lakh income per annum. The landowner hoped that with the coming of the Fire Service Station at least one of her family member should be given employment.

The community expressed the need for the Fire Service Station as it has caused major damage due to fire, they stated that the village has three major water sources and one water source has been identified to supply water to the fire service station.

A Public Hearing was held on the 28th June, 2018 at the office ground of the Mawryngkneng Dorbar Hall. The Hearing was attended by community members and government officials from the Office of the Deputy Commissioner (Revenue Branch), East Khasi Hills District and from the Office of the Superintendent of Police, Fire and Emergency Services. The proposed land acquisition was accepted by all present.

This. final Social **Impact** Assessment report includes a detailed Social Impact Management Plan which attempts to mitigate potential negative

impacts that may arise from the land acquisition.

The SIMP includes measures such as the protection of water sources, providing employment opportunities to qualified community members as well proposing a mechanism for grievance redressal.

It is seen that there is a need to install Fire Service Station at Mawryngkneng as the existing Fire Station is located far away to be able to effectively respond to emergencies.

Rehabilitation Measures

- Smt. Syorlin Lawai, the legal owner of i. the land, may be compensated as per the First Schedule of the RFCTLARR Act 2013. This may include the:
 - Market Value of land as determined under Section 26 of the RFCTLARR Act, 2013...
 - Factor by which the market value is to be multiplied in rural areas
 - The value of assets attached to the property.
 - d. Solatium, i.e. for award an



SOCIAL IMPACT MANAGEMENT PLAN

Resettlement Measures

As there will be no families to be i. displaced from the project, the need to resettle or relocate people does not arise.

inconvenience, loss or the like.

ii. When jobs are created through the project, suitable training and skill development should be given so as to ensure employment at a rate not lower than the minimum wages/

Socio-Economic Measures

- Employment to residents of the village i. should be given priority in all of the project phases.
- The village's metaled road adjacent to ii. the project site and which connects the habitation of Pomlahier be not disturbed to ensure connectivity to that habitation of Mawryngkneng village.
- To ensure that there is no haphazard iii. soil dumping in the nearby areas which may affect this agricultural land.
- iv. The area next to the PDS shop, which is near the project site, should be free of soil, pebbles, and other construction material at all times as this shop provides an invaluable services to the community.
- Use of water source for the Fire Station should not adversely affect water other residents of supply to Mawryngkneng village.
- To ensure negligible disturbances to the vi. Church of God during construction phase.

Environmental Measures

i. Under the Forest (Conservation) Act, 1980, Chapter 3, Section 3.1(i) compensatory afforestation must be made for the loss of all trees in the area.

- ii. Trees to be planted to reduce the pollution caused during construction and implementation of the project.
- iii. Protection of the water sources at the project site so as to protect it pollution from during the construction period and thereby enable its use during the operation phase of the project.

Miscellaneous

- i. Any disputes between the stakeholders regarding land ownership should be resolved first and made sure compensation is given to the legal owner.
- Adequate measures should be in place ii. to address unforeseen negative impacts. Institutional measures like a proper Grievance Redress Mechanism (GRM) cell may be installed with a proper notified Grievance Redress Officer (GRO).

Social Impact Assessment report on Additional Land Acquisition for Road Widening of NH 44(E) of Shillong-Nongstoin-Tura Road portion: Mawsawa (Umdishit) to Nongbah Bynther, West Khasi Hills District, Meghalaya

SUMMARY OF THE REPORT

Meghalaya The of Institute Governance was assigned the task of conducting a Social Impact Assessment study on the proposed additional land acquisition for road widening of NH 44E of Shillong- Nongstoin- Tura Road Portion: Mawsawa (umdishit) to Nongbah Bynther, West Khasi Hills District, Meghalaya. The area to be acquired measures approximately 5688.966 Sq. metres which belongs to 26 individual land

owners.

The objective of the project is to avoid traffic congestion of heavy vehicles along NH 44(E) Shillong- Nongstoin- Tura Road; facilitate speedy and smooth transportation of commuters and goods; and to provide better connectivity to various regions in and around the District capitals and Shillong.

From the discussion and desk survey with government officials from PWD Mairang, it emerged that after the construction of NH 44E to Double lane, certain issues like frequent mudslide and landslide, siltation of paddy field, absence of footpath and drainage slab etc have become a grave concern within the villages along NH 44E. Therefore, the main purpose for this additional land acquisition of Shillong- Nongstoin-Tura Road NH



44E Portion: Mawsawa (Umdishit) to Nongbah Bynther is to maintain and stabilize the slope of the land to prevent environmental issues like landslide and mudslide.

The SIA Unit of the Meghalaya Institute of Governance had conducted site visits to the area proposed to be acquired, and also conducted Key Informant Interviews with the officials from Revenue Department, PWD (Mairang), and the Landowners. Group Discussion community discussion were held with the Headman and the community members of Ladmiri. Manai. Pyndengnongbri, Lumsohkhlur, Wahlakhaw, Madam Pyndengumiong, Byhther, Umthied Bynther and Nongbah Bynther. From these interactions, it was found that most of the areas to be acquired were hilly terrain, with habitations and cultivable land.

Through the site visit, consultation and community meeting, the general perceptions of the participants on the additional land acquisition for road widening of NH 44E Shillong-Nongstoin-Tura Road Potion Mawsawa (Umdishit) to Nongbah Bynther are positive as they believe that the additional land acquisition will address to the issues like mudslide, landslide, soil erosion to paddy field area, installation of drainage slab and footpath,

etc which has been caused by the previous land acquisition for improvement of NH 44E Shillong-Nongstoin-Tura Road to Double lane.

From the Social Impact Assessment Study, it can be seen that there are no adverse impact on the social and economic condition of the community members residing along Mawsawa (Umdishit) to Nongbah Bynther. However, the additional acquisition will help address to the issues of land stabilization.

Public Hearing for the proposed additional land acquisition for road widening of National Highway- 44E Shillong- Nongstoin- Tura Road Portion sawa (Umdishit) to Nongbah Bynther was held on the 8th of June, 2018 in Pyndengumiong village, Tirot Singh Memorial Hall, Mairang, West Khasi Hills District. The hearing was chaired by Shri E. Shanpru, Officer on Special Duty, Meghalaya Basin Development Authority along with the SIA Team from Meghalaya Institute of Governance in the presence of Shri P.K Marbaniang OSD MBDA; Sordars from all 9 villages and community members. The participants at the hearing were quick to discuss on the grievances caused by the previous land acquisition for improving NH 44E Shillong-Nongstoin-Tura Road to double lane. Some of the issues raised were delay in payment of

compensation, siltation of paddy field area, absence of side drain and drainage slab in some area, no road safety measures, frequent mudslide, etc. There were no objections to the proposed additional land acquisition for road widening of NH 44E Shillong-Nongstoin-Tura Road Portion Mawsawa (umdishit) to Nongbah Bynther at the conclusion of the Public Hearing.

The report includes a Social Impact Management Plan which has outline suggestions and recommendation based on the type of intervention to manage and mitigate negative impact likely to arise from the project.

PUBLIC HEARING

Public Hearing for the proposed additional land acquisition for road widening of National Highway- 44E Shillong- Nongstoin- Tura Road Portion

Mawsawa (Umdishit) to Nongbah Bynther was held on the 8th of June, 2018 in Pyndengumiong village, Tirot Singh Memorial Halls, Mairang, West Khasi Hills District. The hearing was chaired by Shri. E. Shanpru, Officer on Special Duty, Meghalaya Basin Development Authority along with the SIA Team from Meghalaya Institute of Governance in the presence of Shri P.K Marbaniang OSD MBDA and Sordars from Umthied Bynther, Madan Bynther, and Pyndeng Nongbri. The hearing was attended by 60 participants from Villages of Pyndeng Nongbri, Madan Bynther, Wahlakhaw, Lyngdoh Nongrim, Nongbah Bynther, Mawsawa, Pyndengumiong, Manai, Umthied Bynther and Nongktieh (Wahlulu). There were 22 male participants 38 female and participants.



From the hearing, some of the issues discussed were on the negative impacts like delay in compensation, soil erosion to paddy field, absence of footpath in crowded area, no drainage slab, etc which was caused by previous land acquisition for improving NH 44E to Double lane. However, it can be said that the community members approved the Additional Land Acquisition of NH 44E Shillong- Nongstion- Tura Road portion Mawsawa (Umdishit) to Nongbah Bynther since the acquisition will help stabilize and maintain the slope of the land on the road sides.

SOCIAL IMPACT MANAGEMENT PLAN

The Meghalaya Institute of Governance which is the state nodal SIA unit is pleased to present herewith the Social Impact Management Plan which has been prepared to mitigate negative social impacts that may arise out of the proposed additional land acquisition for road widening of NH 44 Shillong-Nongstoin- Tura Road portion from Mawsawa Umdishit to Nongbah Bynther according to the RFC&T in LAAR Act, 2013. The SIMP consists of a set of mitigation, monitoring and institutional measures to be taken during the design, construction and implementation phases of the project to reduce adverse social

impacts during the various stages of the project.

Summary of Findings

- 26 land owners will be directly affected from the land acquisition. Majority of land falls under habitation cultivation land. With small portion of land belonging to village land (village road and footpath) and religious land (graveyard).
- 17 land owners falling under habitation land will have to relocate themselves after the land acquisition.
- Minimal or no adverse impact on common property resources as the affect in approach road will be felt only during the construction period.
- No negative impact on the community members as a whole as the land acquisition will affect only a small portion of individual land owners residing at the proposed land to be acquired.
- No negative impacts will take place on the food security; cultural or spiritual/ religious place; historical site; entertainment area; vulnerable groups; and social institutions.
- Disruption in usage of public road will be temporary in nature.

Suggestion and recommendations on findings:

Recognizing the social concerns that can arise from the additional land acquisition for road widening of NH 44(E) Shillong-Nongstoin-Tura Road portion Mawsawa (Umdishit) to Nongbah Bynther the following are measures to be adopted to mitigate social impacts from the project.

- · Quick payment of compensation to affected families from the proposed additional land to be acquired.
- Inclusion of land owner names which has been not been included in the proposed list of land owners from whom land will be acquired.
- Publication of list of final land owners name in government gazette and newspaper whose land will be acquired for the additional land acquisition for road widening of NH 44(E).
- Affected families should be provided training on income generation activity like tailoring, beautician. horticulture. agriculture, sericulture, aquaculture, etc so that they can take up other alternative livelihood for income generation.
- Link affected families to government schemes like MGNREGA ensure additional income and benefit to the family.
 - For agricultural or cultivable land, proper drainage or bunds need to be dug up to avoid water logging or soil run off or siltation during rainy season.

- During the construct period, measure should be taken to prevent soil dumping into agricultural land, residential area, gully, or streams which are used by the locals. Use barren land or land as decided by the village authority or land owners for soil dumping.
- After the construction work along National Highway-44 (E), road amenities like footpath, guard rails, proper drainage with slab, rumble strip, speed sign, road safety posters, bus bays, passenger shelter/ shed, approach road, signals and symbols near social institution like schools and community center, etc should be placed and constructed in densely populated area; retaining walls needs to be constructed in elevated slope and unpaved road berm to avoid soil erosion or mud slides; patrolling of police marshall, etc.
- Measures should be taken to regulate and control development activities in land abutting the right of way (ROW) of highways.
- Promote social forestry along the NH 44(E) Shillong-Nongstoin-Tura Road.
- Proper monitoring of and evaluatin working process ensure road to maintainance.

Entitlement, Assistance and benefits:

- In accordance with the RFC&T in LARR Act, 2013, all affected and displaced people will be entitled to a combination of compensation packages and resettlement assistance depending on the nature of ownership right on loss of assets. The project affected families are all titleholders having legal right to the land.
- The land owners would be required to be compensated as per Schedule I of the Right to Fair Compensation Transparency in Land Acquisition, Resettlement and Rehabilitation Act, 2013.
- Each type of loss will be calculated as per the provision made in the RFCT in LARR Act- 2013.
 - The District Collector/ Deputy Commissioner shall assess and determine the market value of the land.
 - Compensation for the trees will be based on their full replacement cost. The District Collector/ Deputy Commissioner shall assess and determine the value of trees and plants attached to the land acquired and use the service of experienced people in the field of agriculture, forestry or any other filed, as may be considered necessary.
 - Advance notice should be given to project affected household (landowners) to harvest crops, fruits, timbers and for temporary loss of land and livelihood, 60 days before the acquisition.

Miscellaneous

- Any disputes between the stakeholders regarding land ownership should be resolved made first and sure compensation is given to the legal owners.
- Adequate measures should be placed to address unforeseen negative impacts. Institutional measures like proper Grievance Redress Mechanism (GRM) cell may be installed with a notified Grievance Redress Officer (GRO).

Social Impact Assessment report on Additional Land Acquisition for Road Widening of NH 44(E) of Shillong-Nongstoin- Tura Road portion: Manai to Wahreng, West Khasi Hills District, Meghalaya

SUMMARY OF THE REPORT

The Meghalaya Institute of Governance was assigned the task of conducting a Social Impact Assessment study on the proposed additional land acquisition for road widening of NH 44E of Shillong- Nongstoin- Tura Road Portion: Manai to Wahreng, West Khasi Hills District, Meghalaya. The area to be measures approximately acquired 3202.634 Sq. metres belongs to 19 individual landowners.

The objective of the project is to avoid traffic congestion of heavy vehicles along NH 44(E) Shillong- Nongstoin- Tura Road; facilitate speedy and smooth transportation of commuters and goods; and to provide better connectivity to various regions in and around the District Headquarters of Shillong, Nongstoin and Tura.

From the discussion and desk survey with government officials from PWD Mairang, it emerged that after the construction of NH 44E to Double lane,

certain issues like frequent mudslide and landslide, siltation of paddy field, absence of footpath and drainage slab etc have become a grave concern within the villages along NH 44E. Therefore, the main purpose for this additional land acquisition of Shillong- Nongstoin-Tura Road NH 44E Portion: Manai to Wahreng is to maintain and stabilise the slope of the land to prevent environmental issues like landslide and mudslide.

The SIA Unit of the Meghalaya Institute of Governance had conducted site visits to the area proposed to be acquired, also conducted Key Informant Interviews with the officials from Revenue Department, PWD (Mairang), and the Landowners. Group Discussion community discussion were held with the Headman and community members of Manai, Nongbah Bynther, Kynshi, Langtor, Wahreng, Pyndengumiong, and Shyrwang. From these interactions, it was found that most of the areas to be acquired were hilly terrain, with habitation and cultivable land.

Through the site visit, consultation and community meeting, the general perception of the participants on the additional land acquisition for road widening of NH 44E Shillong-Nongstoin-Tura Road Potion: Manai to Wahreng are positive as they believe that the additional land acquisition will address the issues like mudslide, landslide, soil erosion to paddy field area, installation of drainage slab and footpath, etc which has been caused by the previous land acquisition for improvement of NH 44E Shillong-Nongstoin-Tura Road to Double lane.

From the Social Impact Assessment Study, it can be seen that there are no adverse impact on the social and economic condition of the community members along residing Manai However, additional Wahreng. the acquisition will help address the issues of land stabilisation.

Public hearing for the proposed additional land acquisition for widening of National Highway- 44E Shillong-Nongstoin- Tura Road Portion Manai to Wahreng was held on the 12th of June, 2018 at Kynshi village, Indoor Stadium, West Khasi Hills District. The hearing was chaired by Shri. A.B.S Swer, OSD, Meghalaya Institute of Governance, along with the SIA Team from Meghalaya Institute of Governance in the presence of Shri V. Swer, Block Development Officer, Mairang; Shri. E. Shanpru, Officer on Basin Special Duty, Meghalaya Development Authority; Officials from Revenue Department, Sordars and community members. The participants at the hearing discussed on the grievances

caused by the previous land acquisition for improving NH 44E Shillong-Nongstoin-Tura Road to Double lane. Some of the issues raised were delay in payment of compensation, siltation of paddy field area, absence of side drain in some area and drainage slab, no road safety measures, mudslide/ landslide, frequent etc. Response on the issues put up by the community members were addressed by the Block Development Officer, Mairang, Shri V. Swer. There were no objections to the proposed additional land acquisition for road widening of NH 44E Shillong-Nongstoin-Tura Road Portion Manai to Wahreng at the conclusion of the Public Hearing.

The report has included a Social Impact Management Plan which has outline suggestion and recommendations based on the type of intervention to manage and mitigate negative impact likely to arise from the project.





PUBLIC HEARING

Public hearing for the proposed additional land acquisition for road widening of National 44E Shillong-Highway Nongstoin- Tura Road Portion Manai to Wahreng was held on the 12th of June, 2018 Kynshi village, Indoor Stadium, West Khasi Hills District. The hearing was chaired by Shri. A.B.S Swer, OSD, Meghalaya Institute of Governance, along with the SIA Team from Meghalaya Institute of Governance in the presence of Shri V. Swer, Block Development Officer, Mairang; Shri. E. Shanpru, Officer on Meghalaya Special Duty, Development Authority; Officials from Revenue Department and Sordars from KynshiMawria, KynshiRashan, Bangla. Kynshi Mawteijrong. The hearing was attended by 66 participants from Villages of KynshiMawria, KynshiPyllun, KynshiMawteijrong, Tiehbah, Shyrwang, Kynshi Mawphanain, Domkseh, Kynshi Bangla, Langtor, Nongshillong,

Kynshi Rashan. There were 29 male participants and 37 female participants.

From the Hearing, some of the issues discussed were on the negative impacts like delay in compensation, soil erosion of paddy field, absence of footpath in crowded area, no drainage slab, etc which was caused by previous land acquisition for improving NH 44E to Double lane. The community members requested for a fair share in the payment of compensation to all affected families who were affected from the previous land acquisition for improvement of NH 44E to Double lane. At the Hearing, the community members present there, approved to the Additional Land Acquisition of NH 44E Shillong-Nongstion- Tura Road portion Manai to Wahreng.

SOCIAL IMPACT MANAGEMENT PLAN

The Meghalaya Institute of Governance which is the state nodal SIA unit is pleased to present herewith the Social Impact Management Plan which has been prepared to mitigate negative social impacts that may arise out of the proposed additional land acquisition for road widening of NH 44 (E) Shillong-Nongstoin- Tura Road portion from Manai to Wahreng according to the RFC&T in LAAR Act, 2013. The SIMP consists of a set of mitigation, monitoring and

institutional measures to be taken during design, construction implementation phases of the project to reduce adverse social impacts during the various stages of the project.

Summary Findings of Additional Land Acquisition for road widening

- 19 land owners will be directly affected from the land acquisition. Majority of land falls under habitation and cultivation land.
- 12 land owners falling under habitation land will have to relocate themselves after the land acquisition.
- No adverse impact on property resources will be felt, except during the construction period.
- No negative impact on the community members as a whole as the additional land acquisition will affect only a small portion of individual land owners residing at the proposed land to be acquired.
- No negative impacts will take place on the food security; cultural or spiritual/ religious place; historical site: entertainment area; vulnerable groups; and social institutions.
- Disruption in usage of public road and utilities will be temporary in nature. Issues with regards to demolishment and reconstruction of footpath, station

- bay, and drainage in populated area has been stress by the community from earlier land acquisition for road widening.
- Request has been made for quick compensation for the loss of assets from the additional land acquisition. **Proposal** has been made that compensation from previous road widening project of NH 44(E) to Double Lane be paid with interest due to delay in payment.

Suggestion and recommendations:

Recognising the social concerns that can arise from the additional land acquisition for road widening of NH 44(E) Shillong-Nongstoin-Tura Road portion Manai to Wahreng the following are measures to be adopted to mitigate social impacts from the project.

- affected Ouick compensation families from the proposed additional land to be acquired.
- Publication of final land owners name in government gazette and newspaper whose land will be acquired for the additional land acquisition for road widening of NH 44(E).
- Affected families shall receive training on income generation activity like tailoring, beautician, horticulture, agriculture, sericulture, aquaculture, etc

- so that they can take up other livelihood alternative income generation
- Link affected families to government schemes like MGNREGA to ensure additional income and benefit to the family.
- For agricultural or cultivable land, proper drainage or bunds needs to be dug up to avoid water logging or soil run off or siltation during rainy season.
- During the construct period, measure should be taken to prevent soil dumping into agricultural land, residential area, gully, or streams which are used by the locals. Use barren land or land as decided by the village authority or land owners for soil dumping.
- After the construction work along National Highway-44 (E), road amenities like footpath, guard rails, proper drainage with slab, rumble strip, speed sign, road safety posters, bus bays, passenger shelter/ shed, approach road, signals and symbols near social institution like schools and community centre, etc should be placed and construct in densely populated area; retaining walls needs to be constructed in elevated slope and unpaved road berm to avoid soil erosion or mud slides; patrolling of police marshall, etc.

- For operating authority, measure should be taken to regulate and control development activities in land abutting the right of way (ROW) of highways.
- Promote social forestry along the NH 44(E) Shillong-Nongstoin-Tura Road.
- Proper monitoring and evaluation of working process to ensure road maintenance.

Entitlement, Assistance and benefits

In accordance with the RFC&T in LARR Act, 2013, all affected and displaced person will be entitled to a combination of compensation packages and resettlement assistance depending on the nature of ownership right on loss of assets. From the survey, the project affected families are all titleholders having legal right to the land.

- The land owners would be required to be compensated as per Schedule I of the Right to Fair Compensation Transparency in Land Acquisition, Resettlement and Rehabilitation Act, 2013.
- Each type of loss will be calculated as per the provision made in the RFCT in LARR Act-2013.
 - > The District Collector/ Deputy Commissioner shall assess and determine the market value of the land

> Compensation for the trees will be based on their full replacement cost. The District Collector/ Deputy Commissioner shall assess and determine the value of trees and plants attached to the land acquired and use the service of experienced person in the field of agriculture, forestry or any other filed, as may be considered necessary.

Advance notice should be given to project affected household (landowners) to harvest crops, fruits, timbers and for temporary loss of land and livelihood, 60 days before the acquisition.

Miscellaneous

- Any disputes between the stakeholders regarding land ownership should be resolved first and made sure compensation is given to the legal owner.
- Adequate measures should be placed to address unforeseen negative impacts. Institutional measures like proper Grievance Redress Mechanism (GRM) cell may be installed with a notified Grievance Redress Officer (GRO).

Social Impact Assessment Report on Acquisition for Land Integrated Facilitation centre - Entry and Exit Point at Aidoba (Janggal Road), South West Garo Hills District

SUMMARY OF THE REPORT

Aidoba is a village that falls under the Betasing Community and Rural Development Block of South West Garo Hills District. The village is about 20 kms from the district headquarter, Ampati and about 41 kms from Tura in West Garo Hills District. Meghalaya shares international border with Bangladesh which is only 11 km (approximately) from the proposed site. One of the main commercial centres important to this region is the Mankachar town in Assam which is about 10 kms.

The Government of Meghalaya's proposal to set up Integrated Facilitation Centre - Entry and Exit Point came as a

concession to the demands of local pressure groups to install the Inner Line Permit (ILP) to check on the entry of illegal migrants into the state. As a consequence of such demands Integrated Facilitation Centre - Entry and Exit Point is proposed to be set up at the border areas and Aidoba (Janggal Road) is one of them.

The area of land that is proposed to be acquired is 14274 sq.m. The plot of the land. selected bv District Administration for the said purpose, belongs to 6 individuals. The project site is mostly an agricultural land where rice is being cultivated. There is also presence of a small stream and few trees adjacent to the proposed site. There is a kutcha structure house which is used as a residence and a shop as well. The village is mostly comprised of the Koch and Hajong community.

> The Meghalaya Institute of



Governance (MIG) had carried out a Social Impact Assessment (SIA) study on the proposed land acquisition for the purpose of setting up of an Integrated Facilitation Centre – Entry and Exit Point at Aidoba (Janggal Road), South West Garo Hills District. The objective of this study is to identify the likely impacts which may result from the proposed land acquisition and the subsequent setting up of the Integrated Facilitation Centre.

The research methods adopted for this study were quantitative as well as qualitative wherein primary data was collected from the respondents using tools Reconnaissance such as Survey, Interviews, Focus Group Discussions as well as Public Meeting and Public Consultations.

The Meghalaya Institute of Governance conducted a Public Hearing on the 28th of June, 2018 on the Land Acquisition for setting up of the proposed Integrated Facilitation Centre (Entry & Exit Point) at Aidoba (Janggal Road) at 11:00 am, as part of the Social Impact Assessment study under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 notified by the of Rural Ministry Development, Government of India.

The Public Hearing was attended by officials of various Government Departments along with the SIA team from Garo Hills. However, all the 6 Land Owners refused to give their land for the proposed project. Therefore, the proposed becomes least feasible.

MAJOR FINDINGS

The primary data collected and gathered from the respondents has been analysed and interpreted by the Social Impact Assessment Team.

Project Affected Families

There are six title holders of the proposed land. The owners of the land are residents of Manjhuri village, Berbari village and Kalaichor Kolaigaon village of Assam. The age group of the respondents fall under 35-59 years. From the respondents, it was found that the majority of them are engaged in agriculture, daily wage and as casual labourers for their livelihood. From among the total six respondents (land owners), three are found to have ration card of Assam and fall under the BPL category.

The study also took the respondents view on whether there was need for the construction of Integrated Facilitation Centre - Entry and Exit point, to which majority of the respondents were of the opinion that the project will help in terms of bringing safety and security in the area but they do not want to give away their land, for setting up of Integrated facilitation Centre - Entry and Exit Point at the proposed site.

Structures to be affected

There is one land owner named Smt Boijonti Hajong, who will be immensely affected from this acquisition as the area to be acquired is used for residential as well as business outlet. There are a number of shops that are likely to be affected during the construction phase of the project. As such the residents will have to vacate or relocate themselves.

Alternate land for the project

The proposed land is well suited for the project implementation but there is an objection from the land owners. Complying with the need to set up Integrated Facilitation Centre - Entry and



Exit Point, the village Nokma had decided to help District Administration to find an alternative land for the project.

Road and Transport

There is one PWD road which connects to Mankachar and Garobadha towns. The road is nearby to the proposed project site. The close proximity to the border with Assam makes it easy for the local people of the surrounding villages to go into adjoining areas of Assam and vice versa. The highway adjacent to the proposed site which connects Mankachar to Garobadha serves as an important economic route for the people of the surrounding villages and for the State as well. It also demarcates the boundary for Meghalaya and Assam. Hence many goods are being transported and people travel frequently on a daily basis through this route. There are also village/ interior roads which are mostly used by the village people to travel to nearby adjoining markets and also to Assam.

It can be noted that majority of residents travel mainly for marketing, educational, trading and commerce. The people have access to public transport in the area with auto, bus and sumo services found in plenty. But due to the close proximity to Assam, most people from the village travel on foot.

Water Source

There is a stream next to the proposed site which is mainly used by the people as a source of drinking water for their livestock. Over the stream there is a small bridge made of bamboo which connects the paddy field (proposed project site) to a shop situated in the front site of the project site.

Impact on Women and children

The inability to practice cultivation in the proposed area may impact women cultivators who share their work with their men folk. It may affect their safety and accessibility to natural resources which were erstwhile available nearby. Children of affected land owner may be affected in case they need to vacate the house/shop due to proposed project.

Places religious and cultural importance

There are no places of religious, cultural importance near the land proposed to be acquired.

Present use of the Land

The proposed land at present is mainly used as an agricultural area where rice is being cultivated. As per interaction with the primary stakeholders it was found that the proposed agricultural land is a fertile land where rice is being grown twice in a year.

Food security

Food security of the land owners are at a high risk since the proposed project site is an agricultural land where rice is being cultivated twice in a year for their consumption. On the other hand, the second most affected are the agricultural labourers. After the rice is cultivated, the remains from the field are used as fodder for their livestock.

Affected or vulnerable groups

All of the affected families from the proposed land acquisition belong to the Scheduled Tribe, Koch tribe settled in Assam but use the proposed project site for agricultural purposes.

Social Issues

There is large population of Hindus in Aidoba, Joyfar and its adjoining areas and similarly a large population of Muslims in the areas bordering Assam. Through the study and discussions held, it was found that the area surrounding Aidoba had witnessed communal tensions before and one major incident of communal clash between the Hindus and the Muslims where some people even lost their lives. Following the incident, strict

vigil by the police and patrolling by CRPF are seen as a constant and a daily affair.

The study also found that the primary concern of the people here are influx and illegal immigration. This can be stated as being the key issue in this part of the region which can be addressed by the Integrated Facilitation Centre - Entry and Exit Point.

Economic and livelihood activities

All the six title land owners are directly dependent on the proposed project site for their livelihood. The shop keepers would also be affected indirectly if they have to vacate the place at the time of construction phase.

Note: Due to the reluctances of the land owners to share their views on the proposed project site to set up at their village, the detailed assessment could not be made.

PUBLIC HEARING

The Meghalaya Institute Governance conducted a Public Hearing on 28th June, 2018 on Land Acquisition for setting up the Proposed Integrated Facilitation Centre (Entry & Exit Point) at Aidoba (Janggal Road) at 11:00 am as part of the Social Impact Assessment study under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 notified by the Ministry of Rural Development, Government of India. All the six land owners were not willing to part with their land to the Government for the proposed project. The Public Hearing was attended by Government Department representatives and South West Garo Hills District Administration namely Florina Boro MCS, EAC Revenue branch Ampati, Shri A. G. Momin MCS, BDO Betasing, Shri Rahul Singh DFO, (T) Tura, Shri S. Nanda, J.E.P.W.D (R) NEC Tura, Shri Dhaneswar Pathak, Hav, BN, along with the MIG SIA Team. Shri Bryan Silkam R. Mark, Asst. Manager I/C MIG, concluded the Public Hearing with a vote of thanks.

SOCIAL IMPACT MANAGEMENT PLAN

The Social Impact Management Plan has been prepared to mitigate negative social impacts that may arise out of the proposed land acquisition to establish an Integrated Facilitation Centre - Entry and Exit Point according to the RFCTLAAR Act, 2013. The SIMP consists of a set of mitigation, monitoring and institutional measures to be taken during the design, construction and implementation phases of the project to

reduce adverse social impacts during the various stages of the project.

Measures Avoid. Mitigate to **Compensate Impact**

Resettlement Measures

- As per Section 8 of the RFCTLARR I. Act 2013 the Rehabilitation Commissioner shall. publish Rehabilitation approved and Resettlement Scheme by affixing it in conspicuous places in the affected areas.
- II. As there will be 1 household and few number of shops whose structures will be demolished during the construction of the project, proper resettlement plans need to be put in place.
- III. As per Section 101 of the RFCTLARR Act 2013 when any land acquired under the Act remains unutilised for a period of five years, it shall be returned to the legal owners or the legal heirs.
- IV. As per Section 41 (6) as the land shall be acquired from a Scheduled Tribe family, one-third of the compensation amount due should be paid to the affected family as first instalment. This would be extremely useful to help these families who will lose their residential structures to construct another residential structure.

Replacement of lost residences by V. giving affected households a constructed house as per the Indira Awas Yojana6 scheme or the equivalent cost of a house may be offered in lieu of the constructed house. Each affected family will not get more than one house under the provisions of this Act.

Rehabilitation Measures

- i. The six legal land owners of the land may be compensated as per the First Schedule of the RFCTLARR Act 2013. This may include the:
 - Market Value land as determined under Section 26
 - Factor by which the market value is to be multiplied in rural areas
 - The value of assets attached to the property.
 - i.e. • Solatium, an award for inconvenience, loss or the like.
- ii. The Second Schedule of the Act is applicable to all affected families and compensation may be paid as per it.
- iii. If any affected household has been reduced to the status of a marginal farmer on landless, they shall be allotted a minimum one acre of land in the command area.
- iv. When jobs are created through the project, suitable training and skill development should be given so as to

- ensure employment at a rate not lower than the minimum wages; or; One-time payment of five lakhs per affected families or; Annuity policies that shall pay not less than two thousand rupees per month per family for twenty years.
- v. Each affected families should be given monthly subsistence allowance for a period of one year. As they are ST displaced from schedule area, another fifty thousand rupees is to be paid.
- vi. Each affected families shall be given a onetime financial assistance transportation cost. They shall also be granted one-time resettlement allowance.

Social Measures

The affected families should be resettled preferably in the same Scheduled Area in a compact block so that they may retain their ethnic, linguistic and cultural identity (Section 41 (7) of RFCTLARR Act, 2013)

Environmental Measures

Under the Forest (Conservation) Act, 1980 Chapter 3 Section compensatory afforestation must be made for the loss of all trees in the area.

- ii. Trees to be planted to reduce the pollution caused during construction and implementation of the project.
- iii. Protection of the water sources at the project site so as to protect it from pollution during the construction period and thereby enable its use during the operation phase of the project.

Miscellaneous

Rehabilitation Resettlement and Committee

Although Section 45(1) of the RFCTLARR Act 2013 puts provision for the establishment of a Resettlement and Rehabilitation Committee only when the area of land to be acquired is more than one hundred acres, it may be suitable to constitute a similar body to see and review and monitor the progress of rehabilitation and resettlement once in a month till the process of rehabilitation and resettlement is completed. This Committee is also set up for the purposed of carrying the postimplementation social audits and grievance redressal.

Social Impact Assessment Report on Additional Land Acquisition for the purpose of expansion of North Eastern Indira Gandhi Regional Institute of Health Medical Science, **NEIGRIHMS**

SUMMARY OF THE REPORT

The Meghalaya Institute of Governance (MIG) is assigned the task of Social Impact Assessment study on the proposed additional land acquisition for expansion of NEIGRIHMS at Mawpat C&RD block, East Khasi Hills District, Meghalaya. The additional land for acquisition measures approximately 20 acres/80949.36 Sq.mtrs more or less, and belongs to the Pyngrope Clan of Umpling, Shillong, under the ownership of Smt. Constancia Pyngrope, and P.O.A. Shri. Charles Pyngrope.

The proposed land to be acquired falls under the administration of Mawpat village, Mawpat C&RD block which is about 2 km from the NEIGRIHMS campus at Mawdiangdiang village. The type of land to be acquired can be classified as an arable hilly area having pine trees, matured local trees species, bamboo clump, paddy field, drinking water source, washing platform, fishing ponds and stream. A small portion of the proposed land to be acquired is used by Shri Pyius Wankhar, farmer and tenant who has one residential semi-kutcha house, and three livestock's shed for cattle, pig, and poultry.





The objective of the proposed land acquisition for expansion of NEIGRIHMS is to develop a dwelling unit for the serving doctors, nurses and employees who have come from various States of North-Eastern region and mainland India. This proposed land will also be used to establish building for Dental College and Paramedical Institution as per requirement and needs of the Institution. The idea is for this unit to run as a selfcontain township which is sustainable and retainable on its own

The approach and methodology adopted for Social Impact Assessment is a descriptive one. This method describes the specific behaviour or facts concerning the nature of the situation. The SIA Unit of MIG had conducted site visits to the area proposed to be acquired and has also conducted Stakeholder Consultation. Interview Focus Group Discussion,

Schedule. Hearing and Public disclosure with line departments, officials from the requiring body NEIGRIHMS, traditional head, land owners (directly affected family), tenants (indirectly affected families) and community members of Mawpat village.

During the interaction and group discussion with the dorbar of Mawpat village, it was learned that, the said proposed land acquisition will have both positive and negative impacts. With the expansion of NEIGRIHMS, it will cater to more residents and also accommodate a large section required medical practitioners. On the other hand, the dorbar anticipated that the acquisition of the land may contaminate the drinking water ground resource through infiltration safety causing concerns to the neighbourhood.

The Social Impact Assessment Study has revealed the absence of adverse impact on the social and economic condition of the community members residing at Mawpat. Only the drinking water source/ washing platform will be affected. In fact, the positive outcome from additional land acquisition the enhance the living conditions of the staff in a more congenial and spacious manner. This will also resolve the congestion at the existing buildings, and accommodate additional medical practitioner researchers benefitting the people at large. A Public Hearing and disclosure on the draft Social Impact Assessment Report was held on the 20th August, 2018 at the Community ground of the Mawpat Dorbar Hall. The Hearing was chaired by Shri ABS Swer, O.S.D, MIG, in the presence of Shri David T. Umdor, Deputy Director (Admin) NEIGRIHMS (requiring body), Smt Elissa J.B Wankhar, Executive Engineer (civil), Shri Charles Pyngrope, MLA, and Headmen from Mawpat, Mawdiangdiang, Mawkasiang Diengiong and Mawlong Mawtari. There were 121 community members who attended the Public Hearing. From the hearing, it was concluded that the community members present at the hearing have no objection to the proposed additional land acquisition but have provided further suggestions and recommendations to mitigate unforeseen problems especially on the usage and accessibility of the water source at the proposed land to be acquired.

The Social Impact Management Plan suggestions has made and recommendations based on the type of intervention managerial to mitigate negative impact likely to arise from the project.

SOCIAL IMPACT ASSESSMENT

From the stakeholder consultation and field survey, the following chapter draws out the social impact (positive and negative) those are likely to come up from the proposed expansion of NEIGRIHMS.

Land Assessment:

From the field survey and interaction, the land to be acquired is an arable land covered with huge pine trees. The land belongs to an individual land owner Smt Contancia Pyngrope, POA with Shri Charles Pyngrope. The plot of land proposed to be acquired falls under the of village jurisdiction Mawpat administration.

Impact on project affected families:

A total of two households will be directly affected from this acquisition. One project affected families that is the land owners who has no objection to this acquisition and one displaced family that is the tenant who will be deprived from using the land for grazing, residing/habitation, drinking water source, cultivation, etc.

Impact on agricultural land:

The land used for agricultural purpose will be converted into a residential area. The tenant who uses the land for paddy and potato cultivation will be deprived of using this land and he may have to give up cultivation as he has no other land.

Impact on private structure:

From the field survey, a total of 5 structures that is 1 residential kutcha household; 3 livestock's shed and 1 toilet will be dismantled. The structure belongs to the tenant who has been residing for over 78 years or more in the proposed land to be acquired.

Impact on livelihood and income:

The land acquisition will have a negative impact on the tenant as he will be deprived in the usage of land and will have to be relocated which may not have the same facilities as the present location. However, with the proposed acquisition, employment opportunities can be given to the tenant to avoid any negative impact on his income and livelihood.

Impact on resources available in the village:

No will be negative impact experience during the project phase on schools, urban health centre, PDS, village road, village footpath, religious institutions and land, community hall, market area, anganwadi centre, playground, etc.

However, one drinking water source and one washing platform will de dismantle from this acquisition. This will also deprive the local people from Mawdiangdiang, Mawkasiang from utilizing the water source.

Impact on food security:

Since the land acquisition is made on small area, there is no negative impact on the food security of the area or the state.

Impact on public roads and utilities

will No negative impact experienced on public utilities like road, transportation, electricity, and PHE rural supply. However, proper road water connectivity may happen when settlement increases in the area. This will also allow for the improvement and maintenance of the existing NEIGRIHMS road which is more or less the width of a village road.

Impact on the village norms, beliefs, values and cultural life:

The proposed project will not have any negative impact on the village norms, beliefs, values and cultural life.

Impact on environment:

The impact on the environment will be minimal. However, clearing of trees will take place to create space for settlement and building. Water source at the project location will be used as drinking water source for the new settlement. Noise pollution and dust pollution will happen during the construction phase only. One Pucca Residential women headed household may likely be partially affected during the construction period. A

stream bordering the proposed project area need to be prevented from pollution as it is used for irrigation for downstream villages.

Impact on vulnerable groups, women, old person, differently able:

No impact will be felt on vulnerable groups, women, old person and differently able people from this land acquisition.

Impact on workforce and employment opportunities:

The proposed project during the construction and operation phase will provide employment opportunity for the local as well as people coming from other States. Different working groups will be employed and will also create employment opportunity for the local people in and around the area.

Impact on health service of the region:

The proposed expansion of NEIGRIHMS will further improve the accessibility to health service paramedic. This proposed expansion of NEIGRIHMS will also attract more doctors and nurses to come to this region.

Impact on social security and safety issues:

The proposed project will have no negative impact on the social security and safety of the area. However, traditional institution of Mawpat village has pointed out the fear on increase of infiltration in the area which is becoming difficult to manage by the local authority.

SOCIAL IMPACT MANAGEMENT PLAN

The Meghalaya Institute of Governance which is the state nodal SIA unit is pleased to present herewith the Social Impact Management Plan which has been prepared to mitigate negative social impacts that may arise out of the proposed land acquisition for Expansion of NEIGRIHMS at Mawpat village, East Khasi Hills according to the RFCTLAAR Act, 2013. The SIMP consists of a set of mitigation, monitoring and institutional measures to be taken during the design, construction and implementation phases of the project to reduce adverse social impacts during the various stages of the project.

Summary on major finding:

- The proposed land to be acquired for expansion of NEIGRIHMS falls under the administration of Mawpat village, East Hills District measures Khasi about 80,949.36 Sq. metres (more or less) belongs to only one land owner Smt. Constancia The landowners Pyngrope. and clan Pyngrope has no objection to this acquisition.
- The prime objective for the acquisition of land for expansion of NEIGRIHMS is to construct a dwelling place for employees and staffs of NEIGRIHMS from various working groups. The proposed land will also be used for setting up building for dental college and paramedical institution.

- One family (tenant) who is primarily dependent on the land for his livelihood and income will be affected from this acquisition as he will be deprived from using the land for cultivation, grazing and habitation. A total of 4 structures belonging to the tenant, 1 residential kutcha household; 3 livestock's shed and a toilet will be dismantle during the process of acquisition.
- The community members from Mawdiangdiang and Mawkasiang will be deprived from using the drinking water source and 1 washing platform which is located at the proposed land to be acquired will be affected.
- No negative impact will be experience on public utilities like road, transportation, electricity, rural water supply infrastructure likes schools, urban health centre, PDS, village road, village footpath, religious institutions and land, community hall, market area, anganwadi centre, playground, etc

Suggestion and recommendation from finding:

The following are the suggestions and recommendations to be taken consideration during the project construction phase.

Pre-construction phase

➤ Issue fresh notification stating that the proposed land to be acquired falls under the jurisdiction of Mawpat administration

- and not Mawdiangdiang administration as published under Section 4(2) of RFCT in LARR Act, 2013.
- > Proposed for signing a Memorandum of Understanding or agreement with the dorbar of Mawpat and NEIGRIHMS to ensure easy flow of project phase.
- A new washing platform site can be identified and constructed downstream from the water source to ensure that local people from Mawdiangdiang Mawkasiang continues to access to this utility.
- Avoid damming or pollution of the stream with sediment or construction debris near the proposed land to be acquired used for irrigation purposes by downstream villages and to prevent water logging in the construction site.
- > Avoid encroachment to private land and shared walkway.
- > Permission should be taken for clearance of trees from concerned line departments.
- > Avoid drilling of ground water or construction of bore well. Consultation with expert person should be considered if drilling is required at the proposed project area.
- > dentification of areas for water harvesting and water recycling to reduce the water issues in the area.
- > Construction phase
- > Identify proper area for storing of construction materials, gravel stones and sand before construction.

- Screening or proper fencing of the construction site (temporarily permanently) to avoid disturbance to adjacent or nearby property residential household from dust and mud
- Excavation for wall foundation etc from the proposed land to be acquired should not cause disturbance to the walkway, MUDA boundary wall, stream, houses etc which borders the proposed plot of land.
- Identify area for proper disposal of excess sediments/ construction debris.
- > Employment of local people and outsider both skilled and unskilled can be recruited for masonry work, ensuring their availability of labour license.
- Ensure that construction workers are provided with facilities like sanitation, drinking water and first aid box.
- Safety measure needs to be followed to prevent accident for construction providing insurance coverage at the time of construction.

Operation Phase

- Medical waste (if any) generated from the proposed land to be acquired shall be **NEIGRIHMS** treated under in-house medical waste disposal unit.
- Employment opportunities for the local people wherever deem fit should be taken into account by the requiring body.

- > Permitting the local people to have access to road or pathway facilities within the proposed land to be acquired.
- Upgradation or improvement of existing NEIGRIHMS road to avoid congestion.
- Take up tree plantation and landscape activities in the proposed area.

Entitlement, Assistance and Benefits

In accordance with the RFC&T in LARR Act, 2013, all affected and displaced people will be entitled to a combination of compensation packages and resettlement assistance depending on the nature of ownership right on loss of assets. The project affected families are all titleholders having legal right to the land.

- The land owners would be required to be compensated as per Schedule I of the Right to Fair Compensation Transparency in Land Acquisition, Resettlement and Rehabilitation Act, 2013.
- Each type of loss will be calculated as per the provision made in the RFCT in LARR Act-2013.
 - The District Collector/ Deputy Commissioner shall assess and determine the market value of the land.
 - Compensation for the trees will be based on their full replacement cost. The District Collector/ Deputy Commissioner shall assess and determine the value of trees and plants

- attached to the land acquired and use the service of experienced people in the field of agriculture, forestry or any other filed, as may be considered necessary.
- Advance notice should be given to affected household project (both families landowners and whose livelihoods is primarily dependent on the land acquired) to harvest crops, fruits, timbers and for loss of land and livelihood, 60 days before the acquisition.
- The land owner and the families whose livelihood is primarily dependent on the land acquired are entitle to benefits as per Schedule 2 under RFC&T in LARR Act, 2013, the element of Rehabilitation and Resettlement entitlements for all affected families. In addition to the provision in the first schedule.

Social Impact Assessment Report on Land Acquisition for Construction of Custom Office at Borsora, South West Khasi Hills district, Mawkyrwat

SUMMARY OF THE REPORT

The Meghalaya Institute of Governance (MIG) is assigned the task of Social Impact Assessment study on the proposed to acquire existing land which is currently used for borsora LCS for construction of Borsora Custom Office to be developed by the Government of Meghalaya measuring an area of 347.035 Sq.mtrs more or less, at Ranikor C&RD Block, South West Khasi Hills District, Mawkyrwat.

The research strategy that the SIA-Unit adopted is a descriptive method, describe the specific behaviour or facts concerning the nature of the situation. Field survey and consultation were



conducted with the key stakeholders, officials from Borsora LCS, Syiem of Hima Langrin, headman of Borsora, and community members on the 06th of July 2018. From the consultation, it put forward the difficulties faced by the office due to lack of basic infrastructure like office, storage room, accommodation, godown etc. On assessment of the likely impact on socio-economic condition it was found that there are no negative impact on the community rather it will increase the security and safety of the region. Further, a public hearing was held on the 7th of September, 2018 which saw an attended of 51 participants who unanimously approved proposed land acquisition requested for quick implementation of the project.

The Social Impact Management Plan has made suggestions and recommendations based on the type of



managerial intervention mitigate negative impact likely to arise from the project.

PUBLIC HEARING

Public hearing for the proposed additional acquisition for land the construction of Custom's Office at Borsora, South West Khasi Hills district was held on the 7th of September, 2018 at Borsora village. The hearing was chaired by Shri. A.B.S Swer, Officer on Special Duty, Meghalaya Institute of Governance, along with the SIA Team in the presence of officials from Borsora LCS, Shri Tashi. T.N. Bhutia, Superintendent and Shri. Ashish Duller, Inspector, Syiem of Hima Langrin Shri Nongtei S Syiemiong, and Borsora Sordars Shri N. Marak. The hearing was attended by 51 participants

from the villages of Borsora, Shippur, Upper Lakma, and Phlangmawprah. There were 38 male participants and 13 female participants.

Conclusion:

The community members present at the hearing unanimously approved to the land acquisition proposed and has requested for quick implementation of the project.

SOCIAL IMPACT ASSESSMENT

From the stakeholder consultation and field survey, the following chapter draws out the social impact (positive and negative) likely to come up from the proposed construction of custom office at Borsora.



Land Assessment

From the field survey, secondary data and interaction with key stakeholder, proposed land to be acquired can be classified as populated land with no plantation. The land belongs to the Hima Langrin. The proposed location is at Borsora market area, where the existing Borsora Custom Office is operating from.

Impact on project affected families

The proposed land acquisition will not affected any individual households as the ownership of the land falls under the Hima Langrin, Syiemship. Only loss of land ownership will be felt by the Hima Langrim, Syiemship after the acquisition.

Impact on agricultural land

Since the land to be acquired falls under the settlement area, there is no agricultural activity in and around the area.

Impact on private structure

No negative impact will be felt on private structure except for a short period during the construction phase of the project.

Impact on livelihood and income

No negative impact will be felt on the livelihood and income of the Hima Langrim and the community as a whole.

Impact on resources available in the village

No negative impact will be experience during the project phase on schools, health centre, PDS, village road, religious

institutions, cremation ground, market area, and anganwadi centre. However, since the project location is in a populated area, minimal and temporary impact will be felt by nearby shops and households during the construction phase.

• Impact on food security

Since the land acquisition is made on small area, there is no negative impact on the food security of the area or the state.

Impact on public roads and utilities

No negative impact will be experienced on public utilities like road, transportation, electricity, and water supply. However, there is an urgent need for proper road connectivity and water accessibility to the area.

Impact on the village norms, beliefs, values and cultural life

The proposed project will not have any negative impact on the village norms, beliefs, values and cultural life.

• Impact on environment

No negative impact on environment will be experienced as there is no requirement for clearance of trees or forest area or water sources.

Impact on vulnerable groups, women, old person, differently abled

No impact will be felt on vulnerable groups, women, old person and differently abled people from this land acquisition. However, chances for employment opportunity may arise.

Impact on workforce and employment opportunities

project The during the proposed construction and operation phase will provide employment opportunity for the local as and when deem fit. This will further improve the opportunity for self – employment among the local people.

Impact on health and wellbeing

No negative impact will happen on the health and wellbeing of the local people.

Impact on social security and safety issues

The proposed project will have no negative impact on the social security and safety of the area. However, this will further improve vigilance in the area which will further enhance the safety and security of the region. This will also improve the export services in the area.

SOCIAL IMPACT MANAGEMENT **PLAN**

The Meghalaya Institute of Governance which is the state nodal SIA unit is pleased to present herewith the Social Impact Management Plan which has been prepared to mitigate negative social impacts that may arise out of the proposed land acquisition for construction of custom office at Borsora village, South West Khasi Hills district according to the RFCTLAAR Act, 2013. The SIMP consists of a set of mitigation, monitoring and institutional measures to be taken during the design, construction implementation phases of the project to reduce adverse social impacts during the various stages of the project.

Summary of major findings:

- The land to be acquired falls under the ofjurisdiction Hima Langrin, Syiemship measure an area of 347.035 Sq.m at Ranikor C&RD block, SWKH district.
- > The proposed land to be acquired is classified as populated area lies in the market area of Borsora, where the existing Borsora Custom office is currently operating from.
- > The land acquisition will have no impact on the social and environmental issues as the proposed land will be used as office cum residential area and the acquisition is made in a very small area.
- From the field survey and stakeholder consultation, no impact will be felt on community infrastructure and public service.
- ➤ No resettlement and rehabilitation will arise from this acquisition.

Recommendations:

The following the recommendations and suggestions:

Pre-construction phase

- Avoid blockage of stream with sediments at the project site to avoid water logging and allow for easy flow of rain water and perennial water.
- Avoid encroachment to private lane and shared walkway.
- ➤ Identify proper area for storing construction materials, gravel stones and sand before construction.

Construction phase

- > Screening or fencing of the construction site (temporarily or permanently) to avoid disturbance to adjacent or nearby property, residential houses and shop area from dust pollution.
- Excavation for wall foundation etc from the proposed land to be acquired should not cause disturbance to the walkway which borders the proposed plot of land.
- > Proper disposal of excess sediments/ construction debris to avoid water logging at the construction site.
- Employment of local people both skilled and unskilled for masonry work while ensuring their possession of labour license.
- Ensure that construction workers provided with facilities like sanitation, drinking water and first aid box.
- > Safety measure needs to be followed to prevent accident for construction workers providing insurance coverage at the time of construction.

Operation phase

- > The community members of Borsora and Syiem of Hima Langrin requested for the construction of road to the Zero point of Indo -Bangladesh Border.
- Provide employment opportunity to the local people wherever deem fit.
- Avoid dumping of waste in the stream and river near the project location.

Entitlement, Assistance and Benefits

In accordance with the RFC&T in LARR Act, 2013, all affected and displaced people will be entitled to a combination of compensation packages and resettlement assistance depending on the nature of ownership right on loss of assets. The project affected families are all titleholders having legal right to the land.

- The land owners would be required to be compensated as per Schedule I of the Right to Fair Compensation Transparency in Land Acquisition, Resettlement and Rehabilitation Act, 2013.
- Each type of loss will be calculated as per the provision made in the RFCT in LARR Act-2013.The District Collector/ Deputy Commissioner shall assess and determine the market value of the land.
- The land owner and the families whose livelihood is primarily dependent on the land acquired are entitle to benefits as per Schedule 2 under RFC&T in LARR Act, 2013, the element of Rehabilitation and Resettlement entitlements for all affected families in addition to the provision in the first schedule.

Social Impact Assessment report on Land Acquisition for **Proposed** Dhubri-Phulbari Bridge over River **Brahmaputra**

SUMMARY OF THE REPORT

The Government of Meghalaya had notified the Meghalaya Institute of Governance for carrying out Social Impact Assessment Study for the land acquisition for Dhubri-Phulbari Bridge over river vide Notification Brahmaputra RDA.6/2018/22, Dated Shillong, the 25th April 2018. The site for construction of Dhubri- Phulbari Bridge falls under Demdema C&RD Block. The proposed bridge is going to connect the two states of India namely Assam and Meghalaya. Dhubri is the Headquarter of Dhubri district in Assam and is situated on the bank of the river Brahmaputra and

Gadadhar, whereas Phulbari is a village located in the West Garo Hills district of Meghalaya. The shortest distance from Tura to Phulbari village via Selsella is 73.5 km approximately.

The area to be acquired is located in Bangsidua village and also has a stream by the same name. The area to be acquired has 2 (two) titled land holders. The proposed site is located next to the GHADC Forest Department campus right after crossing a small bridge in Phulbari. The existing road is widely being used by people of the adjoining connecting to Chibinang which is 7.2 kms Singimari which is 36 kms approximately from Phulbari.

The research methods adopted for this study were quantitative as well as qualitative wherein primary data was collected from the respondents using tools



such Reconnaissance Survey, as Interviews, Focus Group Discussions as well as Public Meeting and Public Consultations.

MAJOR FINDINGS

The primary data collected and gathered from the respondents has been analysed and interpreted by the Social Impact Assessment Team.

Project Affected Families

There are two titled holders of the proposed land. The owners of the land are residents of Phulbari Sub-division of the state of Meghalaya. The age group of the respondents fall under 30-68 years. From the respondents it was found that the majority of them are engaged in business for their livelihood. One of the respondents (Land Owner) is a Government of Assam Retired PWD driver. Shri Parimal Dey has a total of 6 members in his family and Shri Rana

Dey's total family members are 5. Therefore the total number of affected people would be 11. Out of these, three males from the age group of 28 years to 52 years are engaged in business. Three children from the age group 5 years to 20 years are students and the wives are the home makers.

Total area to be affected

The GHADC measurements for land are: 1 Bigha= 5 Kattas and 1 Katta= 20 Lessa and 1 Bigha= 1,333 sq mts, Patta no. 308, Dag no.289 Class of the Land is a trade site, Grade D Land (prime commercial land). The total area for acquisition for the construction stands at 3 Bigha 6 Lessa (14,869 Sq.m). The total number of people affected by the project is only 2. The acquisition will also lead to relocation of 2 households who are living in the proposed site, causing loss of their property.

According to the statement given by land owners, they have no objection on the



construction of the bridge if they get the full and fair compensation. They may need to be relocated to their own alternate agricultural land i.e in Dewankata around (8-9 Bigha) and Masangpani (2 Bigha).

Structures to be affected

The acquisition will also lead to relocation of 2 households who are living in the proposed site, causing loss of their property. The proposed site has 4 nos. of RCC houses with Tin roof and 2 pucca sanitary bathrooms/toilets, with overhead water tank/pump arrangements and with electricity and water connection. In addition, they have pucca ring-wells and sanitary tanks (Photos Attached). A sizeable number of trees were also seen to be present in the proposed area numbering to a total of 63. It was also observed that the Bangsidua stream runs next to the proposed site.



Alternate land for the project

The proposed land is well suited for the project implementation but there is an objection from the land owners. As they are not happy with the rate of compensation that was decided to give to the Land Owners by the concerned Government Department.

Road and Transport

Phulbari is a village located in the West Garo Hills district of Meghalaya. The shortest distance from Tura via Selsella is 73.5 km approx. The existing Phulbari road is widely being used by the people of the adjoining areas connecting to Chibinang which is 7.2 kms (from Phulbari) and Singimari 36 kms approx (from Phulbari). The route is seen to be economically and socially important as it connects from Phulbari to Singimari and Tura, the District Headquarter of West Garo Hills. The route thereby provides access to markets, health facilities and various other goods and services to the people. It can be noted that majority of residents from Assam travel into Meghalaya mainly for marketing, trading and commerce which is vice versa. The people have access to public transport in the area with auto, bus and sumo services. But due to the close proximity to Assam, most people from the village travel via boat.

Water Source

There is a stream named Bangsidua which runs next to the proposed site. Similarly, the village itself got its originality from this stream as Bangsidua village. The residence of the area utilised the stream for different purposes like, washing their clothes, using the water in cultivation and it is the main sources for drinking water for their livestock.

Impact on Women and children

Total of three children (students) from the two affected families seems to be affected in case they do not get proper compensation as they will require vacating the house.

Places of religious and cultural importance

There are no places of religious, cultural importance near the land proposed to be acquired.

Present use of the Land

The proposed land at present is a residential area.

Food security

Food security does not seem to be affected.

Affected or vulnerable groups

The two affected families from the proposed land acquisition belong to the Bengali community.

Social Issues

There seem to have no social issues faced by the Land owners and their family. Even the residence of that village does not face any social issues.

Economic and livelihood activities

The people of the area are mostly engaged in Business, Agriculture and Horticulture activities.

PUBLIC HEARING

The Meghalaya Institute of Governance conducted a Public hearing on the 5th of October, 2018 on the Land Acquisition for the purpose of setting up of Dhubri-Phulbari Bridge over Brahmaputra at Phulbari PWD IB at 11:00 a.m. as part of the Social Impact Assessment study under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 notified by the of Ministry Rural Development, Government of India.

The Public Hearing was attended by Shri Daniel Ingty, Director MBDA, western zone, Shri Pittingson R. Marak, MCS, BDO Demdema C&RD Block, Shri Bryan Silkam R. Marak, Asst Manager & coordinator MIG, Shri Balseng Sangma, Nokma Bangsidua village, two land owners along with SIA workers of MIG Tura and the general public.

SOCIAL IMPACT MANAGEMENT PLAN

The Social Impact Management Plan has been prepared to mitigate negative social impacts that may arise out of the proposed land acquisition for the construction of Dhubri - Phulbari Bridge over the River Brahmaputra according to the RFCTLARR Act, 2013. The SIMP consists of a set of mitigation, monitoring and institutional measures to be taken during the design, construction and implementation phases of the project to reduce adverse social impacts during the various stages of the project.

Mitigate Measures to Avoid, **Compensate Impact**

Resettlement Measures

- i. As per Section 8 of the RFCTLARR Act 2013 the Rehabilitation Commissioner shall publish the Rehabilitation approved and Resettlement Scheme by affixing it in conspicuous places in the affected areas.
- ii. As there will be 2 household whose structures will be demolished during the construction of the project, proper resettlement plans need to be put in place.
- iii. As per Section 101 of the RFCTLARR Act 2013 when any land acquired under the Act remains unutilised for a period of five years, it shall be returned to the legal owners or the legal heirs.
- iv. As per Section 41 (6) as the land shall be acquired from a Scheduled Tribe family, one-third of the compensation amount due should be paid to the affected family as first instalment. This would be extremely useful to help these families who will lose their residential another structures to construct residential structure.
- v. Replacement of lost residences by households giving affected constructed house as per the Indira Awas Yojana3 scheme or the equivalent

cost of a house may be offered in lieu of the constructed house. Each affected family will not get more than one house under the provisions of this Act.

Rehabilitation Measures

- i. The 2 legal land owners of the land may compensated as per the First Schedule of the RFCTLARR Act 2013. This may include the:
 - Market Value of land as determined under Section 26
 - Factor by which the market value is to be multiplied in rural areas
 - The value of assets attached to the property.
 - Solatium, i.e. an award for inconvenience, loss or the like.
- ii. The Second Schedule of the Act is applicable to all affected families and compensation may be paid as per it.
- iii. If any affected household has been reduced to the status of a marginal farmer or landless, they shall be allotted a minimum one acre of land in the command area.
- iv. When jobs are created through the project, suitable training and skill development should be given so as to ensure employment at a rate not lower than the minimum wages; or; One-time payment of five lakhs per affected families or; Annuity policies that shall

- pay not less than two thousand rupees per month per family for twenty years.
- v. Each affected families should be given monthly subsistence allowance for a period of one year. As they are ST displaced from schedule area, another fifty thousand rupees is to be paid.
- vi. Each affected families shall be given a financial assistance onetime for transportation cost. They shall also be one-time resettlement granted a allowance.

Social Measures

The affected families should be resettled preferably in the same Scheduled Area in a compact block so that they may retain their ethnic, linguistic and cultural identity (Section 41 (7) of RFCTLARR Act, 2013)

Environmental Measures

- Under the Forest (Conservation) Act, 1980 Chapter 3 Section 3.1(i)compensatory afforestation must be made for the loss of all trees in the area.
- ii. Trees to be planted to reduce the pollution caused during construction and implementation of the project.
- iii. Protection of the water sources at the project site so as to protect it from pollution during the construction period and thereby enable its use

during the operation phase of the project.

Miscellaneous

Rehabilitation Resettlement and Committee

Although Section 45(1) of the RFCTLARR Act 2013 puts provision for the establishment of a Resettlement and Rehabilitation Committee only when the area of land to be acquired is more than one hundred acres, it may be suitable to constitute a similar body to see and review and monitor the progress of rehabilitation and resettlement once in a month till the process of rehabilitation and resettlement is completed. This Committee is also set up for the purposed of carrying the postimplementation social audits and grievance redressal.

Social Impact Assessment report on Land Acquisition for NH-51 Tura to Dalu Road widening

SUMMARY OF THE REPORT

The existing NH-51 road starts from Bajengdoba in North Garo Hills District and ends at Dalu in West Garo Hills District of Meghalaya. The proposed land acquisition by the Government of Meghalaya is for the road widening of National Highway 51 to 2 lane with paved shoulders and geometric improvement of Tura-Dalu road under JICA funding from Km 85+000 to Km 95+000 and 101+000 to Km 145+000 which demarcates from Chibragre (Goeragre) to Megonggre (Chitoktak) and from Tura Dobasipara (Sangsanggre) to Dalu (Magupara) in West Garo Hills District. The project needs to acquire 282 acres (Approx) of land and construction of Road Over Bridge of 150.00m at 97th km (total 52.00 km approx.). The project requires acquisition of land from both the sides of the existing road. At present, the width of the road is 4.75 meters, which differs from one village to the other. The proposal for widening of road is 10 meters from both sides of the road. This road is about 52 kms that traverses 31 villages.

For the Garo tribe, the custom is the law of the land. The Aking Nokma is the head of the clan and the custodian of the Aking land1. Traditionally, the institution of the is Nokma the hub of the Village Administration around which the basic

network of entire system is interlinked. Most of the land covered under the project is owned by the Aking Nokmas. However, there are also numerous properties owned by the private individuals. The project area consists of 31 Aking land namely: Chibragre Aking, Ganolgre Aking, Duragre Aking, Megonggre Aking, Sangsanggre Aking, Darengre Aking, Dopgre Aking, Jenggitchakre Aking, Bolchugre Aking, Darak Akong Aking, Chekwatgre Aking, Ronggatagre Aking, Gimbil Adinggre Aking, Rongbilbangre Aking, Daluagre Aking, Romba Chisakgre Aking, Rongbretgre Aking, Wakkolnanggre Aking, Dana Bolonggre Aking, Bolmagre Aking, Amongpara Aking, Kerapara Nokat Aking, Kerapara Songma Aking, Songmagre Aking, Mandagre Aking, Rengsipara Aking, Rangdapara Aking, Doldengagre Aking, Karonggre Aking, Tibapara Aking Magupara Aking.

The existing road is in a deteriorated condition, mostly on a rolling terrain. It consists of semi and large curves and certain parts of the road is a hairpin. The mountainous region needs to have more road safety measures but the present road condition is prone to road accidents due to maintenance.

The main objective of the study is to improve the road infrastructure, safety, utilize the available resources and practices, which enhance the road network connectivity for all its users.

The research methods adopted for this study were quantitative as well as qualitative wherein primary data was collected from the respondents using tools such Reconnaissance Survey, Interviews, Focus Group Discussions as well as Public Meeting and Public Consultation.

MAJOR FINDINGS

The primary data collected and gathered from the respondents of the 31 villages has been analysed and interpreted by the Social Impact Assessment Team in the following parameters.

Road and Transport

There is a PWD road which connects Tura town to Dalu further upto Bangladesh International Border, Dalu to Baghmara (NH-62), and Dalu to Garobadha via Ampati. This road would also connect to the proposed NH-51 project. The close proximity to the border with Bangladesh would bridge the gap between the local people of the surrounding villages and our neighbouring counterpart in terms of economic progress and development. The highway adjacent to the proposed site which connects Dalu to Garobadha and Dalu to Baghmara serves as an important economic route for the Garo people and the entire region as well. It also demarcates the boundary for West Garo Hills and South Garo Hills and the border lines between India and Bangladesh. Hence, many goods are being transported and people travel frequently on a daily basis through this route. There village/interior roads which are mostly used by the rural people to travel to nearby markets and Bangladesh.

It can be noted that majority of residents travel mainly for marketing, education, trading and commerce. The people have access to public transport like auto, bus and sumo services. Because of this regular congestion, this road became overcrowded and began to tear resulting in traffic jams and time-consuming travel. At the time of construction there is a possibility that congestion will get aggravated in the area due to presence of infrastructures and labourers. However, it is suggested that till the time the road is completed, the residents may have to discontinue their travel, trade and commerce in order to avoid fatal accidents. The completed road will attract more tourists and better connectivity between India and Bangaladesh, simultaneously improving economic activities and tourism.

Water Source

There are many streams along the proposed project site which is mainly used by the people as a source of drinking water and for their livestock. Over the streams there are small and big bridges and culverts made of RCC which connects the (proposed project site) entry to exit point of the NH-51 Project. The streams are fresh flowing, useful for villagers and society as a whole. The water from the streams are used for various purposes like drinking, bathing, washing clothes and for kitchen, garden, agricultural and for livestock. These rivers and streams will be a good supply at the time of road construction. Nevertheless, this may lead to water pollution and contamination that can affect its value and benefits it once uphold. Therefore, measures should be taken in order to minimise the negative impacts on the water sources.

Impact on Women and children

Total of 31 villages are found to be vulnerable with regards to their trade and commerce. Survey could be conducted only on 25 villages and in the remaining 6 villages, the A.king Nokma is reluctant to cooperate with the team since they were against the land acquisition. In general, if proper compensation is not received by the shop keepers, majority of impact would be on women and children. In addition, inability to practice cultivation in the proposed project area may impact women cultivators who share their work with their men folk. It may affect their safety and accessibility to natural resources which were available erstwhile. Children of affected land owners may be disturbed in case they need to vacate the residential houses/shop due to proposed project. Loss of cultivation and residential areas might affect the women and children in their daily activities. Dust pollution will be another major issue that can adversely affect the overall health of the people especially women and children.

Places of religious cultural and importance

Religious and cultural places are usually preserved as an identity of people worshipping conducting various or activities. In the village of Dopgre, one church and a Cross which belong to the Catholic denomination will get affected. They may have to lose this place of worship and require relocating to a different place that can cause reluctancy due to additional expenses and lack of funds for new construction. Therefore, this is a sensitive issue that needs proper evaluation and concrete decision before implementation of the project.

Current Land Scenerio

The proposed project land present is mainly used for agricultural purposes and horticulture plantations where rice is being largely cultivated. As per interaction with the primary stakeholders it was found that the proposed project land is very fertile and residents mostly are dependent on its production for livelihood. Besides these, the proposed land at present is mainly used for various purposes such as residential, plantation of tress, commercial shops etc.

Food Security

Food security of the land owners are at a high risk since the proposed project site is a purposeful land where they depend for their livelihood. On the other hand, the second most affected are the agricultural labourers. They will lose agricultural field and will have access to no land.

Effects on Vulnerable Sections of the **Society**

Meghalaya is predominantly a tribal state. According to 2001 census, the total population is of 19,92,862 which constitute 85.9 per cent of the states total population. Out of this, the population of the Garo tribes constitutes to 6,89,639 in the state. In the west Garo Hills district where the section of NH-51 is located, is comprised of Garo tribe. Similarly, all of the affected families from the proposed land acquisition belong to the Scheduled Tribe Garo community.

Social Issues

The total of 31 villages which comes under the NH-51 project areas, 5 villages (Karonggre, Rengsipara, Rangdapara, Kerapara Songma Doldenggagre) are not happy with the current land acquisition especially of the compensation rates offered by Government. Due to this reason, the Aking Nokma did not grant the permission to conduct the survey. It is relatively clear

that the Aking Nokmas is not in favour of giving away the land for the project.

On the other hand, Sangsanggre A.king is on Nokmaship dispute therefore, the SIA volunteers could not approach the village. Altogether there are 6 villages where SIA volunteers could not complete the social impact assessment study. However, from the survey carried out with a few villagers, it can be noted that, few of them are in favour of the said project but, under the leadership of the A.king Nokma they have no words to convey to the Government. There are large population of Garos and some minority of Hajong and Koch in NH-51 project site West Garo Hills and its adjoining areas and similarly a good number of Christians in the areas bordering Bangladesh. Through the study and discussions held, it was found that the area surrounding the project region had witnessed land dispute and Nokmaship clashes between villages.





PUBLIC HEARING

As part of the Social Impact Assessment study under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 notified by the of Rural Ministry Development, Government of India, the Meghalaya Institute of Governance conducted a Public Hearing for all the 31 affected villages of NH-51 (Tura to Dalu) road widening project. The Public Hearing was conducted separately for cluster villages (as per list enclosed below) which falls under Rongram, Gambegre and Dalu C&RD Blocks of West Garo Hills District, Meghalaya.

SOCIAL IMPACT MANAGEMENT PLAN

The Social Impact Management Plan has been prepared to mitigate negative social impacts that may arise out of the proposed land acquisition for NH-51 road widening projects according to the RFCTLARR Act, 2013. The SIMP consists of a set of monitoring and institutional mitigation, measures to be taken during the design, construction and implementation phases of the project to reduce adverse social impacts during the various stages of the project.

Measures to Avoid, Mitigate and **Compensate Impact**

Resettlement Measures

As per Section 8 of the RFCTLARR Act i. 2013 the Rehabilitation Commissioner shall publish the approved Rehabilitation

- and Resettlement Scheme by affixing it in conspicuous places in the affected areas.
- ii. There will be total of 455 (Approx) household and 296 (Approx) numbers of whose will shops structures demolished during the construction of the project, proper resettlement plans need to be put in place.
- As per Section 101 of the RFCTLARR iii. Act 2013 when any land acquired under the Act remains unutilised for a period of five years, it shall be returned to the legal owners or the legal heirs.
- iv. As per Section 41 (6) as the land shall be acquired from a Scheduled Tribe family, one-third of the compensation amount due should be paid to the affected family as first instalment. This would be extremely useful to help these families who will lose their residential structures to construct another residential structure.
- Replacement of lost residences by giving v. affected households a constructed house as per the Indira Awas Yojana scheme or the equivalent cost of a house may be offered in lieu of the constructed house. Each affected family will not get more than one house under the provisions of this Act.

Rehabilitation Measures

i. The 455 (Approx) legal land owners of the land may be compensated as per the First Schedule of the RFCTLARR Act 2013. This may include the:

- Market Value of land as determined under Section 26
- o Factor by which the market value is to be multiplied in rural areas
- The value of assets attached to the property.
- Solatium, i.e. award for an inconvenience, loss or the like.
- The Second Schedule of the Act is ii. applicable to all affected families and compensation may be paid as per it.
- iii. If any affected household has been reduced to the status of a marginal farmer on landless, they shall be allotted a minimum one acre of land in the command area.
- When jobs are created through the iv. project, suitable training and skill development should be given so as to ensure employment at a rate not lower than the minimum wages; or; One-time payment of five lakhs per affected families or; Annuity policies that shall pay not less than two thousand rupees per month per family for twenty years.
- Each affected families should be given v. monthly subsistence allowance for a period of one year. As they are ST displaced from schedule area, another fifty thousand rupees is to be paid.
- Each affected families shall be given a vi. onetime financial assistance transportation cost. They shall also be granted one-time resettlement allowance.

Social Measures

The affected families should be resettled preferably in the same Scheduled Area in a compact block so that they may retain their ethnic, linguistic and cultural identity (Section 41 (7) of RFCTLARR Act, 2013)

Environmental Measures

- i. Once the construction phase starts the project will require disposing of surplus soil. Therefore, the proper locations for disposal of surplus soil should be identified in order to avoid soil erosion and damage to productive land and forest.
- ii. Under the Forest (Conservation) Act, 1980 Chapter 3 Section 3.1(i) compensatory afforestation must be made for the loss of all trees in the area.

- Trees to be planted to reduce the iii. pollution caused during construction and implementation of the project.
- Protection of the water sources at the iv. project site so as to protect it from pollution during the construction period and thereby enable its use during the operation phase of the project.

Miscellaneous

Rehabilitation and Resettlement Committee

Although Section 45(1) of RFCTLARR Act 2013 puts provision for the of establishment a Resettlement Rehabilitation Committee only when the area of land to be acquired is more than one hundred acres, it may be suitable to constitute a similar body to see and review and monitor the progress of rehabilitation and resettlement once in a month till the process of rehabilitation and resettlement is completed. This Committee is also set up for the purposed of carrying the post-implementation social audits and grievance redressal.

Feasibility Study for Special Water Scheme at Mawsynram C&RD Block for Special Purpose Vehicle Society

INTRODUCTION

This feasibility stud y is meant for the Water Supply Scheme of a number of villages in Mawsynram C&RD Block, namely Lawbah, Synnei, Mawkhan -Mawdon, Mawtepiew, Laitsohum. Dewsaw villages to be implemented by the Public Health Engineering Department, Government of Meghalaya under the Special Project Vehicle Society (SP VS) funding.

WATER USE IN **MAWSYNRAM C&RD BLOCK**

Of the total area of Mawsynram block, 1227.55 ha is irrigated while still 3144.55 ha remains un-irrigated or totally rain fed .It has a total of 1494.54 ha command area, of which 993.23 is developed while 456.31 ha is undeveloped. 1371.34 ha of area in the block is irrigated b y government canals. Mawsynram demands 3.00 MCM of water for domestic consumption at 2016 but has been projected to grow to 3.30 MCM in 2020. For crop water Mawsynram Block needs 56.40 MCM in 2016 and is projected to be 58.93 MCM in 2020. Mawsynram C&RD Block needs 0.44 MCM for livestock activities, and projected to grow to 0.50 MCM in 2020. Its industrial activities demand 0.000406 MCM and projected to grow to 0.000487 MCM in 2020.

OBJECTIVE OF THE STUDY

The objective of the study is to examine the feasibility of the proposed project of the PHE Dept. under the SP VS funding.

RESEARCH METHODS

The research stud y involved the use of baseline data as well as data collected on the existing water sources in the village. PRA exercise was conducted, including Social Mapping, Resource Mapping and Seasonality Calendar. Physical verification of the proposed water source of each village was conducted. The discharge, altitude, and distance of the water source and that of the village was recorded.

Secondary information and desk research was done prior to the field research. Where ever necessary Census Report (2011), the District Irrigation Plan, East Khasi Hills and the Detailed Project referred Reports, etc. were

Sl. No.	Name of Village	Date of Visit
1.	Synnei	15.01.2018
2.	Dewsaw	15.01.2018

3.	Mawkhan – Mawdon	17.01.2018
4.	Mawtepiew	17.01.2018
5.	Lait sohum	18.01.2018
6.	Lawbah	18.01.2018



SUMMARY OF FINDINGS

The following are the main findings from all villages proposed.

Present Condition of Villages and their WSS

- The present water supply in these villages is inadequate to meet the growing needs and demands of these villages due to population growth and decrease in discharge of water from the sources. Some villages such as Synnei, Mawtepiew and Laitsohum face acute water shortage.
- Immediately the situation improved by repairing of existing water tanks and pipelines in the village.

- to population growth which Due resulted in the increase in demand for water the WSS is inadequate.
- All villages studied face acute water shortage during the winter months between December to April.
- The main diseases related to water which the villages suffer from are skin diseases and diarrhoea.

Agriculture and Other Economic Activities

- Most of the village respondents are involved in agricultural activities. The main crops cultivated in these villages are broom grass, bay leaf, pepper and piper.
- During the discussion with some village elders the long term negative impact of broom-grass cultivation was highlighted. However, owing to overdependence on this crop as it ensures faster returns farmers are reluctant to replace it with another crop.
- In all the villages the people are open t o new interventions and new ideas to replace high water consuming crops with more sustainable, eco-friendly crops that can bring better remuneration in the long run.

Proposed WSS

All water sources selected occur naturally in which the discharge varies from pre to post monsoon.

Village Specific Observations

- In Dewsaw and Synnei villages there is a strong cohesion in the villages. Households that have better earning capacity and can afford their own water connection drawing from nearby springs willingly share the same with their immediate neighbours.
- Also, in Dewsaw and Synnei villages relatively better off HHs are very accommodating. If there is construction work that is required by a particular household, the work is subcontracted to the workforce from within the village even if they have to postpone the work owing to preoccupation of the village workforce. This practice helps in conservation of resources within the village.
- Laitsohum village has no PHE water supply as yet.
- The water source for Laitsohum WSS is at a lower elevation with respect to the village. As such it is proposed that a suitable motor pump be installed to convey water to the village.

RECOMMENDATIONS

All villages the team visited – with varying water stress levels do need the proposed WSS prepared by the PHE Dept. Based on the findings the following recommendations proposed.

General Recommendations for all Water Supply Scheme:

- An undertaking from the village for taking up afforestation, environment protection and protection of water sources.
- Protection of the catchment area in and around the source to ensure their sustainability.
- Encourage the villagers who currently dependent on broom grass to progressively reduce the acreage of cultivation.
- Afforestation projects need to be taken up intensely to increase productivity and longevity of the water sources.
- Take up plantation of suitable, valuable medicinal and aromatic plants
- Tapping of the discharge-water by construction of chambers and collection tanks
- Being a natural source arising from the sub-surface aquifer, recharging the ground water by means of low cost intervention works, must be carried out simultaneously.
- Existing water supply under the PHE Dept., to be repaired and maintained.
- The existing water tanks storage capacity should be increased.

- Reservoirs to store surface rainfall during water surplus months should be constructed with appropriate technology.
- Rain water harvesting techniques should be encouraged as this village has water surplus during the monsoon. In this regard, it is suggested that MBDA/ other line Depts. be involved.
- Judicious planning for ground water resource development.
- Capacity building for certain able village residents who can maintain the water supply units themselves.
- Capacity building of village residents to re-utilise grey water for other purposes such as in toilets, in kitchen gardens, etc.
- Measures should be taken t o ensure soil conservation as it was seen that agricultural productivity had dropped in the recent past.
- Community herbal gardens in villages according to topography and soil, suitable herbal plants may be introduced.
- Alternative food grains with higher nutritional content may be introduced such as millets which historically was a major food grain for the people of the region.

Project Specific Interventions for Mawkhan – Mawdon WSS

- As regards to the twin villages of Mawkhan-Mawdon in which two separate WSS proposals were prepared by the PHE Dept., the team is of the opinion that a single WSS be considered (1 TP, 1 Reservoir and separate distribution lines).
- The water source of Mawkhan Mawdon discharges sufficient supply which can be also be used for micro-hydel project.

for Project Specific Intervention Laitsohum WSS

Use of sustainable energy sources such as solar pump for the pumping of water for supply to the WSS be introduced in Laitsohum village.

Project Specific Intervention for Synnei WSS

- Construction of collection chambers at the spring sites to store/ conserve surplus water during the monsoon.
- It is also recommended that there be ground water recharge (e.g. through recharge pits) introduced so as to maintain the spring water from the proposed water source.

Project Specific Intervention for Mawtepiew WSS

As the source of the proposed water scheme is nearly 5 kms away from the village, it is recommended that more than one TP be built certain distances apart.

Feasibility study for Special Water Scheme at Shella-Bholaganj C&RD Block for Special Purpose Vehicle **Society**

INTRODUCTION

This feasibility study is meant for the Water Supply Scheme of a number of villages in Shella-Bholagani C&RD Block, namely Pyrkan, Jasir (Saw Kher), Mustoh, Mawryngkhong, Nongwar, Sohlap and Lai Kher villages to be implemented by the Public Health Engineering Department, Government of Meghalaya under the Special Project Vehicle Society (SPVS) funding.

WATER **USE** IN **SHELLA BHOLAGANJ C&RD BLOCK**

Of the total area of Shella – Bholagani block, 493.7 ha is grossly irrigated while still 4404 ha remains unirrigated or totally rain fed. It has a total of 674.37 ha command area, of which 598 is developed while 76.37 ha is undeveloped. 665.37 ha of area in the block is irrigated by government canals. Shella -Bholaganj demands 3.00 MCM of water for domestic consumption in 2016 has been projected to grow to 3.29 MCM in 2020. For crop water Shella - Bholaganj Block needs 47.38 MCM in 2016 and is projected to be 49.51 MCM in 2020. Shella – Bholagani C&RD Block needs 0.18 MCM for livestock activities, and projected to grow to 0.19 MCM in 2020. Its industrial activities demand 0.00344 MCM and projected to grow to 0.004128 MCM in 2020.

OBJECTIVE OF THE STUDY

The objective of the study is to "examine the feasibility of the proposed project of the PHE Dept. under the SPVS funding."

RESEARCH METHODS

The research study involved the use of baseline data as well as data collected on the existing water sources in the village. PRA exercise was conducted, including social mapping, resource mapping and seasonality calendar. Physical verification of the proposed water source of each village was conducted. The discharge, altitude, and distance of the water source and that of the village was recorded.

Secondary information and desk research was done prior to the field research. Where ever necessary Census Report (2011), the District Irrigation Plan, East Khasi Hills and the Detailed Project Reports, etc. were referred to.

Sl. No.	Name of Village	Date of Visit
1.	Mustoh	23.01.2018 & 26.03.2018
2.	Nongwar	23.01.2018
3.	Laikher	29.01.2018

4.	Mawryngkhong	29.01.2018 & 26.03.2018
5.	Pyrkan	30.01.2018
6.	Jasir	30.01.2018
7.	Sohlap Presbyterian LP School	30.01.2018



SUMMARY OF FINDINGS

The following are the main findings from all villages proposed.

Present Condition of Villages and their WSS:

The present water supply in these villages is inadequate to meet the growing needs and demands.

Agriculture and Other Economic Activities

Most of the village respondents are involved in agricultural activities except for Pyrkan village.

- The main crops cultivated in the villages are beetle nut, beetle leaf, bay leaf and broom grass.
- Ninety per cent of the residents of the village of Pyrkan are engaged as miners in limestone quarrying.

Proposed WSS

All selected water sources occur naturally, in which the discharge varies from pre to post monsoon.

Village Specific Observations

In Pyrkan village 90 percent of its residents are engaged as miners in limestone quarries.

- The residents do not practice agriculture as they had leased out their agricultural land.
- > Pyrkan village has no PHE WSS. Most of the residents use Umiam River which becomes unusable during the monsoon.
- In Mustoh village there is some water scarcity during the winter season as the PHE water supply is insufficient.
- Mustoh village lacks sufficient storage capacity hence it is proposed that an additional water tank be installed.
- Mustoh village has local laws that prevent tree felling 10 metres from the village water sources which are present in the Rikasiam Protected Forest.
- Some villages such as Mawryngkhong village had PHE water supply till a year ago; however they have not received any PHE water since. They draw water from Umiam River for washing and bathing. For drinking water they have to rely on springs which have very small discharge during the winter season and which are not adequate for the entire village population.

RECOMMENDATIONS

All villages, with the exception of Mustoh village, the team visited – with varying water stress levels do need the proposed WSS prepared by the PHE Dept. Based on the findings the following the are recommendations proposed. General Recommendations for all Water Supply Scheme:

Forest Protection

- An undertaking from the village for taking up afforestation, environment protection and protection of water sources.
- Protection of the catchment area in and around the source to ensure their sustainability.
- Alternatively, the Village Durbars may collectively follow the example set up by Mustoh village and enact village laws preventing de-forestation near the water sources.
- Afforestation projects need to be taken up intensely increase productivity longevity of the water sources.

Encourage Alternative Crops

- Encourage the villagers who are currently dependent on broom grass to progressively reduce the acreage of cultivation.
- Take up plantation of suitable, valuable medicinal and aromatic plants

Protection and Maintenance of Water Sources

- **Tapping** of the discharge-water construction of chambers and collection tanks
- Being a natural source arising from the subsurface aquifer, recharging the ground water by means of low cost intervention works, must be carried out simultaneously.
- Existing water supply under the PHE Dept., to be repaired and maintained.
- The existing water tanks' storage capacity should be increased.

- Reservoirs to store surface rainfall during water surplus months should be constructed with appropriate technology.
- Rain water harvesting techniques should be encouraged as this village has water surplus during the monsoon. In this regard, it is suggested that MBDA/ other line Depts. be involved.
- Judicious planning for ground water resource development.

Capacity Building

- is recommended that during implementation monitoring and evaluation is done by a third party
- > Capacity building for certain able village residents who can maintain the water supply units themselves.
- Capacity building of village residents to reutilise grey water for other purposes such as in toilets, in kitchen gardens, etc.

Miscellaneous

- Measures should be taken to ensure soil conservation as it was seen that agricultural productivity had dropped in the recent past.
- ➤ Community herbal gardens in all villages according to topography and soil, suitable herbal plants may be introduced.
- ➤ Alternative food grains with higher nutritional content may be introduced such as millets which historically was a major food grain for the people of the region.

Project Specific Interventions for Mustoh WSS

- As regards to the water surplus village of Mustoh it is recommended that the additional water tank be installed to ensure that there is proper water harvesting for lean periods.
- During the interaction with the Headman of Mustoh village, he expressed that the village had found a more suitable water source for the proposed project and wishes that the proposed water source for the Mustoh WSS be shifted from Umsohduit to Umbyrsieh which has a higher water discharge. This may be taken into consideration before the project is implemented.

Project Specific Interventions for Pyrkan WSS

- Shifting of the dug well in Pyrkan village to another site so as to prevent it being contaminated by water from the Umiam River.
- Treatment plants and methods so as to make the water from the Umiam River potable for the residents of the village and serve as an alternative source.

Project Specific Interventions for Laikher WSS

In consideration of local sentiments it is recommended that other means, apart from GI pipes be used to draw water from the springs to the main tank.