Forest is a scarce resource in Bangladesh historically where Sal (Shorea robusta) forest is the third largest forest ecosystem followed by Hill and Mangrove forests. This is the only forest located in the central part of the country while the other two forest ecosystems are located in the periphery of the country (Hill forest in the East and North-East part and Mangrove in the South-West part of the country). This forest is an integral part of country’s natural heritage and it has been playing a significant role in fulfilling the diversified needs of the local people, their livelihood and environmental stability. This important forest has been reported to have under severe pressure since last two decades mostly because of illegal deforestation owing to encroaching land for industrialization by the powerful group of people and for livelihoods by the poor group of people living surrounding the forest. Currently it is believed that the situation is becoming more severe as the impacts of climate change. Current information reveals that most of the forest land does not have satisfactory tree coverage and productivity of the forest is very low.

In consideration of above issues, this study was initiated to investigate the effect of climate change that affects forest and livelihood of forest-dependent communities and current/potential adaptation measures that would enable communities to remain resilient. This study was undertaken in the periphery of the National Sal (Shorea robusta) forest under the Tangail District of Bangladesh as a part of South Asian regional initiative. The investigation was accomplished through intensive survey of 50 households, Focus Group Discussion (FGD) and analysis of long term meteorological database.

The findings revealed that resources particularly forest and forest products have been reduced drastically. The changing trend of climate along with anthropogenic activities might have contributed for decreasing the forest resources and livelihood options of the community. A steady increasing trend of both maximum and minimum temperatures over
time was noted. Similarly, an increasing trend of rainfall during monsoon months (June to October) and a decreasing trend during winter were recorded. The results of the analysis of the long term climatic data base particularly the changing trend of temperature and rainfall have strongly been supported by perceptions/opinions of the community people. The findings also revealed that both government and community have already adopted some adaptation measures to protect the forest, livelihood of local people and environment.

The findings of the study were discussed at the national level stakeholder meetings in the presence of the researchers, graduate students, extension personnel and mid-level policy makers. In consideration of the project findings and field experiences, the following policy statement has been drawn:

“Government/concerned agencies should promote social forestry program with more active participation of local communities and undertake other adaptation measures especially construction of small water reservoirs and control of pests and diseases to protect the valuable forest and livelihood of the people”

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