WIRELESS FOR COMMUNITIES (W4C)

PHASE II (2011-2012)

STATUS UPDATE

May 2012

PROGRAMME	Wireless for Communities (W4C)
PROJECT	Wireless for Communities (W4C) – Phase II – India Expansion Framework & South Asia Outreach
PERIOD	2011-2012
OBJECTIVE	1. To extend the success of the Chanderi Phase I project in 3 new locations in India with network deployment; 2. To introduce the W4C programme in South Asia with ToT programme; 3. To address network connectivity and access deficits enabling reduction of information and digital divide.
TARGET	1. To create 3 wireless communities in 3 locations in 3 States in India – Tura (Meghalaya); Baran & Tilonia (Rajasthan)- with deployment of wireless mesh network; 4. Deploy only 'Training of Trainer' (ToT) programme in 2 South Asian countries (Bangladesh and Bhutan).
OUTCOME	1. Connect cluster based communities with connectivity and access; 2. To provide channels for information and content access; 3. To facilitate service delivery in education, health and livelihood; 4. To propel knowledge accumulation and contribute to building knowledge communities.
CURRENT STATUS	**India Expansion Framework** **1. Tura Wireless Community** o On experiment basis a 3 point – to – point node with a base station established in Tura during October 2011 o The network currently functioning within a radius of 5 km o A number of 5 nodes connected within 3 km radius mostly securing NGOs and educational institutes o The project will go for an expansion and outreach phase during January – March 2012 **2. Baran Wireless Community** o At Baran, 35 point-to-point nodes for a relay station have been established. o The network covers maximum 35 kilometers and minimum 10 kilometers of the region o The network provided wireless connectivity at 7 night schools-cum-libraries and 8 cluster centres (each cluster centre covers 8-10 villages).

	3. Tilonia Wireless Community ○ Wireless mesh deployment is yet to begin due to local infrastructure and logistical hurdles ○ The deployment of the wireless mesh network completed in April. ○ The network provided wireless connectivity at 150 night schools of Barefoot College and community radio station **South Asia Framework** **1. Bangladesh (ToT) Programme** The ToT programme was conducted during 21-23 November, 2011 at Dhaka, Bangladesh with support from country partner, D.Net. Through this training programme, 11 participants were trained on the concept of wireless mesh network technology and the deployment of the wireless mesh network. **2. Bhutan ToT Programme** DEF conducted three days ToT programme from 11 April to 13 April, 2012 in Thimpu with a support by regional partner Rural Education and Development (READ), Bhutan. Through this training programme, 11 students were trained on the concept of wireless mesh network technology and the deployment of the wireless mesh network.
PHASE II OUTREACH & EXPERIENCE SHARING	1. DEF and ISOC organized the W4C Summit 2011 during the 8th Manthan Award South Asia Annual Digital Festival 2011 in New Delhi. The Summit was organized to share experiences, challenges and generate wider perspective of the wireless technology in India and South Asia. 2. On specific note, the Summit was organized to share the experiences from the second phase of the project. The Summit provided a platform for stakeholders to meet with ground deployment and implementers who have deployed the wireless mesh networks at their respective region. At the Summit, 4 case studies were presented and showcased with success and challenge indicators. 3. The Summit enabled wireless stakeholders, including wireless trainers, government stakeholders, technology providers and others to share their experiences, views, ideas on the need, challenges and solutions in wireless technology and connectivity. 4. *The Summit highlighted the following major issues and also highlighted the impact of ToT programme in Bangladesh:*

	i. Easy accessibility and uniformity of internet connection are important factors of the satellite bandwidth. While other networks such as broadband, dial-up, wire, etc., provide internet connection particularly to specific region or block or village. The satellite capacity can be deployed well as the cloud and connection point (CP) can be connected to utilize better. For instance, if any VSAT is deployed at any cluster community, the VSAT facility can give 60 Mbps of throughput, which is much more than the entire village community require. It is expected that the cost of setting up satellite connectivity will decrease sooner than later.
	ii. De-licensing process of wireless network is another major issue. In any country, the implementation of de-licensing process happens in short phases. In India, it started as in-door or campus facility and now it could be utilized for outdoor purposes. It is an excellent opportunity to connect the remote regions of the country using wireless network.
	iii. The ToT programme in Dhaka, Bangladesh under the W4C programme has had immense positive impact. The programme invited attention of network providers, academia, implementers who showed keen interest to know and explore wireless network. The project has created value-addition to the government's mission for making Bangladesh as Digital Bangladesh by 2021.

Phase – II: Update in Images

Trainers for Training (ToT) Programme at Tura, Meghalaya

Trainers for Training (ToT) & Deployment Programme at Baran, Rajasthan

Trainers for Training (ToT) Programme at Daka, Bangladesh

Trainers for Training (ToT) Programme at Thimpu, Bhutan

Wireless Mesh Network Deployment at Tilonia, Rajasthan

W4C Summit, December 2011, New Delhi