

## **Biomass energy promotion in Clean Development Mechanism (CDM) perspective in Bangladesh (Summary)**

**Md. Danesh Miah**

Biomass energy sources currently supply some 70% of the country's primary energy supply, though the country does have appreciable gas reserves. Bangladesh has just over 4,000 MW of which 94% is thermal, mostly using natural gas. In earlier times, fuelwood was regarded as a free resource and this together with the heavy demand for agricultural land has led to extensive deforestation rates. Bangladesh is now reported to have the lowest fuelwood consumption per capita in the world.

An area of around 1.14 million ha of government forest land has been totally degraded and the annual deforestation rate is put at 3.3%. In terms of total land use for the country the area of medium to good quality forest has fallen from 20.5% in 1992 to 9.25% in 1999. Current population is 141 million and is projected to reach 220 million by 2030 and 280 million by 2050. Biomass demands have been modelled in accordance with a range of conditions. The baseline scenario makes the assumption that no extension of the forest land is attempted, only the *status quo* is maintained, replanting forest that is harvested in the same year. Under the medium growth scenario, the area of plantations increases by 1% per year. In the third scenario, the area of plantations is allowed to grow extensively so that the level of industrial roundwood production doubles by 2050 and the amount of wood fuel increases from 150,000 m<sup>3</sup> in 2000 to 1.08 million m<sup>3</sup> by 2050.

Scenarios	Round wood '000m3				Woodfuel '000 m3			
	2000	2010	2020	2050	2000	2010	2030	2050
I	477	512	540	492	151	669	415	590
II	477	512	611	703	151	678	495	823
III	477	512	762	930	151	698	657	1082

The paper outlined the positive advantages of the CDM in promoting forestry development but considered that the most important constraints to Bangladesh actively participating in the CDM relates to poor capacity and experience in dealing with such projects. He cited inadequate baseline information, leakage and poor monitoring as principal concerns together with inadequate yields. In order to overcome some of these deficiencies, he recommended such measures as investment in better seed sources, tightening of the silvicultural and management procedures in order to move towards high productivity, short rotation crops.

In terms of land availability for expansion of forest planting, reference was made to the degraded forest land under government control which could be brought back into maximum production. In addition, homestead forests are thought to be a major option since they already provide 70% of all the wood consumed and 90% of the fuelwood, even though the greater proportion is regarded as being degraded.

Secure land tenure coupled with simplified agreements between farmers and utilities for fuel supply is needed along with the recognition that forestry should be treated as an agricultural crop. He considered it important that SRC is promoted to avoid long rotation periods that detracts from farmer interest in forestry. It was noted that the government produced a National Forest Policy in 1994 and a National Energy Policy in 1995 which both address the issue of woodfuel. Tree cover is planned to be increased by 20% by 2015.