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### REDD in Afghanistan: Empowering Women and Increasing Access to Energy

by

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#### Abstract

*Prolonged civil war has resulted in very poor governance and a battered economy and environment in Afghanistan. Firewood is the primary source of household energy in Afghanistan. But the increased demand and poor management and the collapse of traditional and formal regulatory mechanism for extracting firewood from trees has led to a situation in which barely 1.5% of land is now covered with trees down from 5%. This has resulted in a severe crisis of meeting household energy needs with women and girl child, traditionally responsible for collecting firewood, being the major sufferer. The REDD agreement arrived at Cancun can help the rural women of Afghanistan to replant the former degraded forest areas and wastelands in their neighborhood with trees planted for the primary purpose of providing household energy. For this the rural Afghan women would need to be organized at village level and trained and financed under REDD for raising tree nurseries, undertaking planting in their*

*neighborhood, maintaining and supervising the forests and trees, and undertake intermediate harvesting for firewood. The experiences gained in microfinancing of economic activities*

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*undertaken by women in Bangladesh and community forestry experiences in Nepal, Bhutan and India could guide these efforts. Fortunately tree husbandry is one economic activity in which none of the warring factions have any objection to women's participations since tree planting is considered a morally superior activity in Islam and women's role in meeting household energy needs is accepted traditionally. REDD can thus help empower rural Afghan women, help them earn money while increasing their access to household energy.*

*Key words: REDD, Afghanistan, women, empowerment, firewood*

Afghanistan, once a land of vibrant continental crossroads and an ancient hub of trade, has been devastated by an unabated warfare and inter tribal conflicts for the past many decades. At present it is one of the poorest countries in the world, ranked 155<sup>th</sup> with a Human Development Index of 0.349 and Gender Development Index of just 0.310, which is the lowest in the world (World Bank 2010b, IMF, 2010a). Poverty has many dimensions, including low income, lack of education, environmental degradation, and gender inequality (World Bank, 2004) and Afghanistan fulfills all the criteria of being a poor country.

While control over the resources was not the cause of Afghan conflict the general lawlessness and the rebel control of territories has led to severe mismanagement of the available resource of water, land, firewood and grazing areas. There is a continuous increase in the number of men leaving their homes as combatants and also as migrants in search of paid employment leaving the household to be headed mostly by women. Today of the estimated 36% of population in Afghanistan living in poverty, more than 70% are women and girls (FAO). At least 70,000 households are headed by women, mostly widows, in Afghanistan. Households that are headed by women are usually poorer and more vulnerable than those headed by men, because the social restrictions on the kinds of work women can do (UNHRC, 2010). The extreme poverty is made worse by the lack of energy for household. Traditional fuels meet more than 85% of energy requirements and more than 80% of the populace subsist in rural areas and depend on traditional fuels (firewood and crop residues) for cooking and heating purpose.

Due on account of both the complete collapse of governance and the desperation caused by the mounting gaps between the supply and demand of household energy the forests of Afghanistan, never celebrated for its forest, have almost become totally depleted. Illegal logging mainly for the use of firewood consumption is the main cause of deforestation estimated at 30,000 hectares annually (Qureshi, 2002). Also the potential for re-growth of forests and vegetation is seriously affected by heavy fire wood collection. The United Nations Environment Program 2009 report has noted that much of the available tree resources have already been felled for fuel.

Sharp rise in the price of firewood has also led to illegal trade in it for sale in the Kandahar market where wood prices are the highest in the country and even for cross-boundary export to Pakistan where a huge market exists for firewood. The prices of firewood in Afghanistan bazaar soars when winter arrives, a donkey load of firewood to provide warmth for the family for less than a week coasts \$7 (BBC, 2010), which is more than the average weekly wage of most in Afghanistan. This household energy crisis has left a great impact on the lives of Afghan women making their lives worse because the primary responsibility for collecting firewood lies on them. This means that they have to pay more for meeting their energy needs or spend more time and energy trudging longer distances in search of wood, reducing their capacity to undertake alternative work to earn income or simply have more time to take care of

their families. Often, due to the acute shortage of firewood many families have to consume half cooked food impacting their health.

The increased demand coupled with high political instability leading to poor governance and ineffective regulatory mechanism has resulted in severe and continuous loss of forests and tree cover in Afghanistan. Till the first half of the twentieth century the country had a forest cover of about 5% that included almost one million hectares of oak and two million hectares of pine and cedar forests growing mostly in the eastern part of the country. Beside there were open woodland mostly covered by pistachios, almonds and junipers. Today most of the original forests have disappeared leaving behind less than 1.5% of land under forests (World Bank 2010).

### **Domestic energy requirement**

Domestic energy requirements vary with climate, socio-cultural patterns, family size, cooking habits and the type of food consumed. In general, they may be estimated to range from 5 GJ energy input per capita per year for cooking food on an open fire in warm lowland tropics to over 25 GJ per capita per year for cooking and heating in cold upland areas. This is equivalent to 0.5 to 2.0 cum of air-dry wood fuel per person per year (UNCHS HABITAT, 1984; UNESCO, 2005). Given that the average altitude of Afghanistan village is about 600 to 1200 m, and the latitude ranges from 33 to 38 degree north, it is a fairly cold region and we assume an average requirement of 1.0 cum of firewood per capita per year for household energy. If fast growing tree species are planted close to the villages that are able to provide 5 cum per ha per year of biomass productivity it would mean a requirement of 0.2 ha per capita of land under continuous firewood production. The land is available, what is needed is the money and a motivated, skilled and well knit organization spread throughout the land to carry out the massive task.

### **REDD can help address this problem**

The REDD agreement arrived at Cancun can help the rural women of Afghanistan to overcome this crisis by reforesting former degraded forest areas and afforesting wastelands in their vicinity and build homestead plantation, with trees planted primarily for the purpose of providing energy, but managing it in a manner that significantly enhances the carbon stock in the forest and trees of Afghanistan over the baseline.

In accordance with its capabilities and national circumstances, Afghanistan could undertake following REDD activities:

- 1) Reducing emission from deforestation
- 2) Reducing emission from degradation

- 3) Conservation of forest carbon stocks
- 4) Sustainable management of forests
- 5) Enhancement of forest carbon stocks

Because of the small size of Afghanistan's forest cover, the first four options may not have high significance but large parts of its forests that have been deforested over the past many decades could now be taken under the permitted REDD activity of enhancement of forest carbon stocks even though the primary purpose would be increasing availability of firewood. This will help increase the forest cover in Afghanistan and could be assisted by the Quick Start Finance provisions of REDD. More than 3.5% of land or about 2.2 million hectares, which was earlier under forest cover, can now be reforested under REDD provided it has not already been put to other non-forestry use. Also some wastelands near villages could be improved and managed for tree growing with the help of suitable technology and finance. Vast area of pasture lands that comprise 45% of total land area of Afghanistan, and which is being affected by encroachment and degradation, can also be partially utilized for a scattered tree growth that does not alter its primary purpose of pasture by employing an appropriate silvipastoral technique.

Agroforestry activities could also help by providing a range of socio-economic and environmental benefits. For example, trees in agroforestry farm will increase soil fertility through control of soil erosion, maintaining soil organic matter, increasing nutrients input through N fixation and uptake from deep soil horizons and promotion of more closed nutrient cycle (Young, 1997; Nair, 1989). Agroforestry also provides local economic benefits, like farmers gaining higher income from timber, fruits, medicines and extractives than they would from alternative agricultural practices (Cooper *et al.*, 1996).

### **A REDD design that empowers women**

The Cancun Agreement requires a REDD program to ensure full and effective participation of relevant stakeholders, help in reducing poverty and enhance other social and environmental benefits. In Afghanistan we propose a REDD plan that would result in reforestation and afforestation of nearly 2.2 million hectares of its erstwhile forests and other degraded lands with the primary purpose of producing a sustainable supply of biomass energy to rural households, revolve around the most vulnerable section of stakeholders in that land, the women, and take some concrete steps towards fulfilling its biggest social need of empowerment of women.

The key features of this plan can be summarized as follows:

- 1) The priority areas of reforestation and afforestation shall be the available lands for this purpose including the lands formerly under forests and tree covers and utilizable

wastelands in the neighborhood of villages within reasonably easy access of the women of the village. Only lands over which there are no disputes would be taken up for this purpose.

- 2) The species of choice in the beginning shall be suitable fast growing and locally acceptable tree species with high calorific value. As the program takes hold the biodiversity needs shall also be addressed.
- 3) As far as possible, the entire work of raising nurseries, land preparation, digging pits, planting, maintenance, and small scale harvesting and transport shall be undertaken by women of the neighboring villages.
- 4) Most of the responsibility for REDD activities including reforestation and afforestation shall lie with the women of the village who shall be organized as Village Women Council on the line of community forestry organizations like the Joint Forest Management Committees in Nepal and India. The women members shall be paid for the work done by them in accordance with the official wage schedule operational in the country.
- 5) The REDD activities shall include non-forestry economic activities based on micro-credits involving small investments to support the women stakeholders during the gestation period since poor communities cannot wait from returns from harvesting of forestry crops.
- 6) A detailed scheme for microcredit shall be drawn under the guidance of Nobel Laureate Mohammad Yunus, the Founder of Grameen Bank of Bangladesh or a group of persons nominated by him.
- 7) The cost of the entire REDD activities shall be borne under the Quick Start Finance provisions of REDD agreed at Cancun.
- 8) While all the costs shall be borne from the REDD funds all the direct returns from REDD activities shall accrue to the Village Women Councils for sharing among its members as per an agreed formula.
- 9) This would require a well designed and well executed capacity building programme in which Bangladesh, Nepal and India shall be requested to lend necessary technical expertise.
- 10) Complete transparency shall be ensured in the program through innovative means.

We would like to emphasize that women's empowerment is proposed as a very important end objective of this proposal. The critical importance of this has been best captured in the words of the then Secretary General, Kofi Annan, of the United Nations when he told the Afghan Women's Summit for Democracy in 2001 that "*there cannot be true peace and recovery in Afghanistan without a restoration of the rights of women.*" Narayan (2005) defines empowerment as "the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives." The World Bank suggests that promoting engaged citizenship and empowering poor people through

education, health care, access to land and financial capital can improve the effectiveness of economic development, especially where civil liberties are robust (Isham, Kaurmann, and Pritchett, 1997). While it is nobody's case that the civil liberties are anywhere near robust for women in rural Afghanistan the implementation of REDD, if customized to integrate with contemporary realities of Afghanistan, would be a good first step for women empowerment both by providing them with required firewood as well as enhanced incomes.

One of the most important, and fortunate, aspect of this contemporary reality of Afghanistan is that tree husbandry, and its management, is one economic activity in which none of the warring factions have any objection to women's participations since the role of women in meeting household energy needs is accepted traditionally, and even more important, tree planting is considered a morally superior activity in Islam as is evident from the following hadiths:

*“If you have a sapling, if you have the time, be certain to plant it, even if Doomsday starts to break forth.” (al-Munawi, Fayd al-Qadir, iii, 30)*

*“If a Muslim plants a tree, that part of its produce consumed by men will be as almsgiving for him. Any fruit stolen from the tree will also be as almsgiving for him. That which the birds eat will also be as almsgiving for him. Any of its produce which people may eat thus diminishing it, will be as almsgiving for the Muslims who planted it”.(Bukhari, Tajrid al-Sahih, vii, 122)*

*“The reward accruing from seven things continue to reach the person concerned even if he is in his grave: knowledge he has taught, water he has provided for the public benefit, any well he has dug, any tree he has planted, a mosque he has built, recitations of the Qur'an bequeathed to him, and children who pray for him after his death.”(al-Munawi, Fayd al-Qadir, iv, 87)*

And the act of putting a barren land to productive use is an act of virtue –

*“Whoever reclaims and cultivates dry, barren land will be rewarded by God for the act. So long as men and animals benefit from it He will record it for him as almsgiving.”(al-Munawi, Fayd al-Qadir, vi, 39; Haythami, Majmau al-Zawaa'id, iv, 67-8)*

It is reasonable to expect under these favorable conditions such a REDD program would be successful in achieving its objectives of reforestation of lost and degraded woodlands of Afghanistan while increasing the availability of biomass based energy for the rural households and increasing the earnings of Afghan women while empowering them and restoring their self-esteem as doers of good deeds.

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