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# Reforestation Strategies Amid Social Instability: Lessons from Afghanistan

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**Abstract** Foreign and domestic government agencies and other international organizations pursue reforestation programs in rural upper watershed areas of Afghanistan over the past decade to alleviate poverty, combat the insurgency and rehabilitate a depleted forest resource base. Popular programs incorporate cash-for-work to conduct hillside terracing, check dam construction and tree-planting for nut production, fuel wood, timber, dune stabilization, and erosion abatement. Programmatic approaches have varied as a function of accessibility, security and local objectives. Uncertain land tenure and use rights, weak local environmental management capacity, and a focus on agricultural production to meet immediate needs limit interest, nationally and locally. Unreliable security, a lack of high quality tree planting stock, limited technical knowledge and coordination among government agencies, and poor security hamper program expansion. Reforestation success would be most likely where these issues are least acute. The Afghan government should focus on supporting community based natural resource management, developing and disseminating improved conservation tree nursery strategies, and promoting watershed management schemes that incorporate forestry, range management and agromonic production. Reforestation practitioners could benefit from the human and material resources now present as part of the international war effort. Successes and failures encountered in Afghanistan should be considered in order to address similar problems in insecure regions elsewhere when reforestation may help reverse environmental

degradation and contribute to broader social stabilization efforts.

**Keywords** Counterinsurgency · Deforestation · Ecosystem restoration · Pakistan · *Pistacea vera* · Sustainable

## Introduction

Persistent national instability and sporadic local warfare have led to the degradation, and in many instances, devastation of Afghanistan's forest environments. Common signs are overgrazing, deforestation, timber high-grading, indiscriminate fuel wood harvesting, and root excavation (Saba 2001; Shimizu 2006). Total forest cover has decreased drastically from an early 1980's era estimate of 2.2 million ha (3.4% of the land area) with estimates of remaining forest ranging from 60 to 20% of that value (Azimi 2007; Anonymous 2010, 2011). These conditions are bemoaned by local people and Afghan government officials alike, particularly those who witnessed the rapid landscape deterioration beginning with the Soviet invasion in the late 1970's (Formoli 1995). However, despite continuing conflict and poor security in nearly all candidate areas, reforestation has been occurring since the 2001 ouster of the Taliban.

Reforestation is supported by many stakeholders, but motivations differ among international donors, the central Afghan government, and local peoples. Most Afghans are directly dependent on irrigation agriculture for their livelihoods and water management is universally recognized to be the most critical environmental and agricultural issue (Ministry of Agriculture Irrigation and Livestock 2009). Water infrastructure development and maintenance

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