

## SUSTAINABILITY OF AGRO-ECOLOGICAL INNOVATIONS IN THE AGRO-SYLVO-PASTORAL SYSTEMS OF NORTH REGION OF CAMEROUN: THE CASE OF HIGHLY DEGRADED AREAS IN SOUTH OF GAROUA

D. Transitioning to a Viable Climate

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The North region has receive migrant population from the far North region during the drought episode of the years 1983-1984. From the year 1994, the region was saturated with migrants (fig1). Figure 1: Population growth in far North and North regions Source: Barbier et al., (2002), Koulandi (2006), MINPAT & PNUD (2000) To reduce the impact of the over growth of population on soil and vegetation, many projects had developed several agro ecological innovations, in particular agricultural production on plant cover, anti-erosion techniques, anti-erosion strips, stone cordon techniques, the combination of mineral and organic fertilizers, organic fern and crop association. Today, the situation is worrying because three-quarters of these innovations are not sustainable. The study intends to establish a transition to the sustainability of the agro ecological innovation in degraded areas of the South of Garoua dominated by an agro-sylvopastoral system. To achieve this objective, a literature review and interviews was conducted for actors and agro ecological innovations identification. Then, the SWOT tool was used to highlight the strengths and weaknesses of the actors in the provision of support services and accompaniment of the agro ecological innovations implemented. Finally, a synthesis grid of the actors' capacities to be strengthened in the field of agro-ecological innovations was used. The result shows that from 1994 to nowadays, 30 actors from the public sector and the private sector have developed several agro-ecological innovations in the study area. Therefore, an capacity building plan in technological, organizational, institutional innovation of the actors of agro ecological innovation has been proposed for a transition towards the sustainability of agro-sylvo-pastoral systems. The extinguish of agro ecological innovation at the end of project is due to a lack of strengthen of the innovation capacities of project actors and local actors. Derra et al. 2012 support this result by showing that weaknesses in the interactions of actors as well as limitations in the support and supervision services existing in the agricultural, forestry and pastoral sectors require the strengthening of the institutional and organizational environment. The construction of a innovation capacity building plant for the actors of agro-ecological innovation is a best solution for the durability of the agro-sylvo-pastoral resources.