

NATURAL RUBBER-BASED INTERCROPPING SYSTEMS IN CÔTE D'IVOIRE: A REVIEW OF FORTY YEARS OF WORK

Samuel Obouayeba^{1*}, Ayah Marie Chantal Kouadio Boko², Eric Francis Soumahin³, Agnyman Angeline Eliathe Elabo¹, Goué Bernard Dea⁴, Badou Evariste Angelo N'guessan⁵, Christophe Kouamé⁶, Bernard Zéhi¹, Zagbahi Jules Kéli⁷

¹Centre National de Recherche Agronomique (CNRA), Station de Recherche de Bimbresso, 01 BP 1536 Abidjan 01, Côte d'Ivoire

²APROMAC, Fonds de Développement Hévéas (FDH), 04 BP 2112 Abidjan 01, Côte d'Ivoire

³Université Jean Lorougnon Guédé, UFR Agroforesterie, Laboratoire de Physiologie et Pathologie Végétales, BP 150 Daloa, Côte d'Ivoire

⁴Centre National de Recherche Agronomique (CNRA), Direction Régionale d'Abidjan, 01 BP 1740 Abidjan 01, Côte d'Ivoire

⁵Centre National de Recherche Agronomique (CNRA), Direction Régionale de Korhogo, BP 856 Korhogo, Côte d'Ivoire

⁶International Center of Research in Agroforestry (ICRAF), Regional Direction of Abidjan, 30 BP 483 Abidjan 30, Côte d'Ivoire

⁷Centre National de Recherche Agronomique (CNRA), Direction Régionale de Man, BP 440 Man, Côte d'Ivoire

Received: 04 April 2015 Accepted: 19 October 2015

Obouayeba, S., Boko, A.M.C.K., Soumahin, E.F., Elabo, A.A.E., Dea, G.B., N'guessan, B.E.A., Kouamé, C., Zéhi, B. and Kéli, Z.J. (2015). Natural rubber-based intercropping systems in Côte d'Ivoire: A review of forty years of work. *Rubber Science*, 28(3): 211-226.

Natural rubber (*Hevea brasiliensis*) cultivation in Côte d'Ivoire has registered tremendous growth since its introduction in 1955. The expansion of area under rubber cultivation in the country has raised concerns on deforestation, degradation of natural ecosystem, food security *etc.* Rubber is generally intercropped with annual and perennial crops for its economic advantages. Mono-cultures of rubber trees are also coming up in the country. Rubber plantations generate secondary forest ecosystems which are likely to reverse environmental degradation in marginal lands. This paper reviews various works on rubber cultivation in Côte d'Ivoire from a policy perspective.

Keywords: Environment degradation, Forest ecosystem, Intercropping, Land utilisation, Production system

INTRODUCTION

Natural rubber (NR) cultivation was started in Cote d'Ivoire in 1955. Area under the crop was only 1,238 ha until 1975,

which registered significant growth to reach 4.4 lakh ha by the year 2012. Out of this, 3.9 lakh ha of land was under individual holdings of farmers. Majority (75%) of the plantations under the individual holdings