Evaluation of the Impact of the Technologies of Cowpeas Production on the Poverty Reduction, the Food Security, the Environment and Health of Populations in Burkina Faso

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The incomes of African rural populations (in General) and Burkina Faso (in particular), depends on agriculture, including production of cowpeas, an important crop in the overall needs of existence. Wherefore, for several decades, the program protein crops and oilseeds of the Institute of environmental and agricultural research (INERA) in collaboration with his research partner the International Institute of Tropical Agriculture (IITA), developed and diffused several varieties and other cowpeas based technologies (ecological production, natural storage-related, etc.), responding to different agro-ecological constraints and the concerns of producers and adapting to different ecologies. Starting from the conviction that the impact of the activities of research and dissemination of innovations, cowpeas, database can be feasible and sustainable that developing the capacities of individual and collective participation of producers in making decisions related to the production, conservation, consumption and marketing of cowpeas, program and its partners encouraged a holistic approach, encouraging expression of expertise and the autonomy of the producer (male/female, young/old etc.). The used of approach (called Farmers Fields School Fora or fields schools of producers), is a process of education continuous, iterative, participatory and sustainable, engaging and acting all the actors involved (farmers, extension, researchers, NGOs, policy makers, etc.).
Weekly comments (on agronomy, plant pathology, entomology and the specific constraints and their solutions, etc.), were made on each plot by subgroups of women and men, responsible for the said parcel, which debated in plenary (often in the presence of researchers and extension agents).
The assessment of the impact of research and development activities on family farms, was made in the areas concerned. It has combined both economic analysis tools (Gini coefficient as an indicator of the distribution of income) and the Lorenz curve for comparing inequalities between different distributions, as those qualitative (perception studies).
The results show that the adoption of new technologies based on Cowpea (improved varieties, ecological production, natural storage improved, etc.), contributes to a better training and distribution of earnings and the reduction of inequalities in rural households. Using natural botanical products induced reduction of production costs (given the high cost of treatment chemicals and the low level of the purchasing power of farmers), on the one hand, and the negative effects of chemicals on the environment and human health, on the other hand.
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