



**- International Fund for Agricultural Development –
- Scouting and Sharing Innovation in Western and Central Africa –**

- Improved seed multiplication and diffusion by farmers -

I- Background :

1. Name of innovation:

Improved seed multiplication and diffusion by farmers

2. Country - Region:

Benin, Burkina Faso, Cameroon, Ghana, Mali, Niger, Nigeria and Senegal.

3. Organization:

International Institute of tropical Agriculture (IITA)

4. Who is the innovator?

IITA in collaboration with the National Agricultural Research and Extension Systems (NARES) of Benin, Burkina Faso, Mali, Niger, and Nigeria, NGOs, private and public sectors

5. Actors involved:

IITA, International Agricultural Research Centers-IARC (Institute for Crop Improvement in the Semi-Arid Tropics (ICRISAT), NARES, NGOs, Technicians, Producers and Universities.

6. Implementation date:

2000 to present

7. Type of innovation:

Technological

II- Key issues :

8. Summary:

High quality seed is the most important single input for increasing agricultural productivity. In many countries the lack of High Quality Seed (HQS) contributes to low productivity of commodities. Baseline studies in PRONAF participating countries in West and Central Africa showed that cowpea seed is a primary constraint for boosting cowpea production. Main barriers for cowpea seed multiplication and large-scale diffusion include:

- Lack of breeder and foundation seeds;
- Lack of cowpea high quality seeds (HQS-certified seeds);
- Seeds lacking preferred characteristics by farmers;
- Inadequate local and national seeds systems of NARES ;
- Lack of sound policy and institutional environments for the development of effective seed supply systems;
- Insufficient involvement of the private sector in HQS production and diffusion;
- Poor organization of farmer group seed producers.

9. What issue does the innovation address?

The development and diffusion of seed multiplication techniques address the shortage of High Quality cowpea Seed due to poor seed supply systems. The challenge is to multiply and disseminate sufficient good seed through farmers to make it available on a widespread and sustainable basis to farmers. .

10. Key success factors for replication:

The key success factors that contribute to the replication of the seed production and diffusion by farmers include technical factors (preferred characteristics of the cowpea seed), institutional factors (seed certification with standards, administrative), support), performance factors (efficiency, effectiveness and relevancy), climatic factors (characteristics of various agro ecological zones).

11. Accessibility:

- High quality seeds of various preferred cowpea varieties have been diffused to resource-poor farmers including women and youth through Farmer Field Fora. Pronaf have disseminated the High Quality Seeds of various preferred cowpea varieties to farmers and farmers' organizations through IFAD investment projects in the participating countries.
- NGOs and the private sector have accessed and diffused High quality seed to rural communities.

12. Difficulties encountered:

The major difficulties encountered in developing and diffusing cowpea seed include the poor organization of the seed systems of the PRONAF participating countries, scarcity of funds for developing breeder and foundation seed, and the lack of small enterprise involvement in seed distribution systems.

13. Financial aspects:

Funds have been allocated to the coordination team for cowpea seed multiplication and diffusion. The funds have been managed by IITA and the coordination team at country level. IITA also carried-out all the administrative duties of reporting financial and management information to the steering committee and to IFAD. A national coordinator at country level, served as the financial and logistical link to the regional coordination.

III- Technical Summary :

14.

Cowpea seed development starts with breeding. The breeder seed and foundation seed are developed by researchers and tested on-station for desirable characteristics and performance. Through trials the on-station validated lines are tested across various agro ecological zones in collaboration with farmers and farmers' organizations. After testing, the seed are multiplied based on the regulations (certification) for diffusion to NARES staff, farmers, NGOs, and the private and public sectors.

IV- Follow up :

15. Key contacts:

Name	Organization	Email
Dr. Ousmane Coulibaly	International Institute of Tropical Agriculture	u.coulibaly@cgiar.org
Dr. Clementine Dabiré	Institut de l'environnement et des recherches Agronomiques Burkina Faso (INERA)	clementine.dabire@coraf.bf clementinedabire@yahoo.fr
Dr Mamadou Touré	Institut d'Economie Rural Mali (IER Mali)	mamadou.toure@ier.ml
Dr . Toudou Adam	Université de Niamey, Niger	cresani@intnet.ne , a.toudou@refer.ne

16. Useful web link:

www.pronaf.info

17. Key documents: (Name of the document + Link or Contact or Co ordinates)

- Activity reports: http://www.fidafrique.net/IMG/pdf/Pronaf_TA_Notes_2005-2006-2.pdf
- Pronaf evaluation Report: http://www.fidafrique.net/IMG/pdf/PRONAF_Eval_20.12.2006.doc_final_.pdf
- Scientific papers: <http://www.fidafrique.net/rubrique568.html>