A BULLETIN OF THE TROPICAL LEGUMES II PROJECT

About the Bulletin

The Bulletin of Tropical Legumes is a monthly publication of the Tropical Legumes II (TL II) project, funded by the Bill & Melinda Gates Foundation, and jointly implemented by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Center for Tropical Agriculture (CIAT) and the International Institute of Tropical Agriculture (IITA) in close collaboration with partners in the National Agricultural **Research Systems of target countries** in sub-Saharan Africa and South Asia. TL II aims to improve the livelihoods of smallholder farmers in drought-prone areas of the two regions through enhanced grain legumes productivity and production.



Women association seed producers of Guidan Gaba.

Institutional innovations to empower women groundnut seed producers and processors in Dosso region in Niger

Linking women seed producers to markets

Groundnut is a major source of income and protein for rural households in West and Central Africa (WCA). It is a women's crop and as such, women farmers play a major role in groundnut value chains. They are the major producers, processors and marketers. However, they have been constrained by inadequate institutional, policy and market support to improve seed and groundnut oil and paste value chain efficiencies.

Since 2007, ICRISAT through the Tropical Legumes II (TL II) project, has been working with farmers' associations, seed producers and women oil cake and paste processors in Dosso region of Niger to improve the efficiency of groundnut seed and product value chains.



Seed production

Since 2007, 27 farmers' associations comprising 870 members (of which 640 are women) from 11 villages (Faska, Hankoura, Guidan Gaba, Sambera, Sia, Takoye Bangou, Koma Beri, Karakara, Wassangou, Doula, Moussa Dey, and Tounga) have been empowered in areas of seed production, processing and distribution.

For two years, farmers' associations were engaged in participatory variety selection trials with five varieties (4 modern varieties namely RRB, J11, ICG 9346, Fleur 11 and a local check 55-437). Depending on the village, two to three modern varieties were selected. For instance, in Guidan Gaba, RRB and the local check 55-437 were preferred. The selected varieties were used to build seed supply systems. Women were then trained in seed production technologies as well as small-scale business and marketing skills. Seed quality insurance and quality control were monitored by the traditional extension services under the National Seed Service. The women have successfully quintupled the production of basic and certified seed from 17 tons in 2008/09 to 92







Table 1. Trends in seed production of different classes by women farmers in Dosso region of Niger.

	Туре о		
Year	Basic	Certified	Total (kg)
2008/2009	4,472	12,243	16,715
2009/2010	7,040	26,000	33,040
2010/2011	10,950	25,680	36,630
2011/2012	13,275	22,550	35,825
2012/2013	20,840	71,550	92,390
Total	56,577	158,023	214,600

Table 2. Groundnut area and seed production by variety and institution in Niger in 2011/12.

Institution	Variety	Area (ha)	Production (kg)	Production (%)
TL II – ICRISAT		190.3	90,731	72.50
	55-437	2	500	0.40
	Fleur 11	81.4	44,044	35.19
	ICG 9346	18.1	7,339	5.86
	RRB	42.1	19,886	15.89
	J11	2.7	1,119	0.89
	TS32-1	44	17,843	14.26
Other partners*		26.9	31,680	25.31
Total		217.2	125,147	100

 \ast Other partners include Alheri Seed company, Lutheran World Relief (LWR) and FAO.

tons in 2012/13, including more than 2000 tons of quality declared seed (Table 1).

In 2011/12, the women's association in Dosso region supplied about 72% of the total groundnut seed produced in Niger (Table 2). However, women were confronted with the problem of commercialization of seed.

Seed marketing strategies

The project experimented with two marketing strategies to resolve this constraint, the sale of small seed packs and interlinked contracts with seed companies. A pilot experiment to assess the potential demand for small seed packs by smallholders was conducted in Dosso region. Seed was packed in packs of 5 kg, 2 kg, 1 kg and 0.5 kg) and half of the seed was treated.

Results showed that more than 64% of groundnut seed stocks were sold -- 78% of 5 kg packs, 73% of 1 kg packs, 61% of 2 kg packs and lastly 55% of 0.5 kg packs. Sixtynine percent of the treated seed was purchased but not



Sale of small groundnut seed packs.

significantly different from the untreated seed estimated at 57%. Significant differences were observed between selling points based on the positioning, level of knowledge of agro-dealers and small-scale retailers about marketing and business skills and the agro-ecological zone.

All selling points located in the local markets sold on average 79% of the seed stocks compared to an estimated 40% in those far from the local markets. Selling points in drier areas sold 48% of the packs compared to an estimated 78% in less drier areas. The level of knowledge was not found to be a significant factor in sales though shops managers with better knowledge in marketing and business skills sold 70% of their seed stocks against 55% for those with poor knowledge.

From a small-scale private entrepreneur's point of view, this experiment yielded losses estimated at US\$0.51/kg of seed. Such small scale seed enterprises will profit only if selling points are located in local markets, agro-dealers are well trained in small-scale marketing and business skills and the size of the seed pack is over 1 kg. This experiment will be repeated during the second year on a much larger scale.

During the last two years, following a stakeholder meeting of actors along the groundnut seed chain, seed companies pledged to sign contracts with women associations. At the beginning of cropping seasons, formal contracts were signed between seed companies (Manoma, AINOMA, Alheri, FUSA'A) and women associations. Interlinked contracts where inputs are provided at 20% interest to women at the beginning of the cropping season to be reimbursed in kind at harvest were formalized. Women receive a guaranteed price of 30% above the on-going grain price in the market at the time of purchase. Seed companies purchased the seed no later than 31 December 2012. Quality criteria included in the contracts were varietal and physical purities and good germination. In addition, the bags used for the seeds should be new and carry at least 40 kg of shelled nuts. The contracts were made flexible in terms of reimbursement because farmers



A groundnut seed bag being weighed before purchase by Manoma, a seed company.

could reimburse credit in cash or kind. In 2012/13, the contracted amount of 50 tons was honored by seed companies without delay or contract failure. In 2013/14, seed companies signed 10 contracts with women seed producers based on 80 ha of groundnut with the goal of achieving 500 ha in the next two years. This scheme is working relatively well as seed companies are not involved in seed production and thus bear no production risks and the quality of the produce is very good. Moreover, women farmers have a guaranteed market and are getting a 30% higher price than the on-going grain price in the market at sale time.

CONTRAT DE PARTENARIAT

Entre l'entreprise Aind A A Représenté par Thrachter Marson Sion
Et
Le groupement HNICH AMEANI village de SAMBERA commune de SAMBERA.
Département de <u>DOSSO</u> Région de <u>DOSSO</u> Contact <u>98.154898</u>
Article1: Objet du contrat Le présent contrat a pour Objet, la fourniture des intrants agricoles par l'entreprise
<u>Article III : Engagement de l'entreprise;</u> Dans le cadre de l'exécution de ce présent Contrat l'entreprise <u>AINOTA</u> s'engage à fournir au groupement de <u>INNEAN ANCANC</u> , les quantités de : Semence <u>30 Socia</u> , engrais <u>30 Socia</u>
Article III : condition de cession des Intrants Les Intrants d'une valeur de
<u>Attlicle IV:</u> Prix d'achat des semences produites: Les semences sont rachetées deux mois après la campagne agricole (octobre-novembre) à un prix supérieur de 30% au prix du marché au moment de la transaction. (le prix du marché étant la référence).
Article V : Engagement du groupement; Dans le cadre de l'exécution de ce présent contra le groupement <u>Article MRMEA.N</u> s'engage à utiliser les intrants mis à sa dispositione : à s'embourer à l'entreprise le crédit qui lui a été accordé. Le groupement s'engage à respecter les conseils tectiniques.
<u>Article VI.</u> Qualité et conditionnement des somences Les semences produites doivent répondre aux nomes de qualité requise (pureté variétale, pureté physique, gemination). Les sacs utilisés doivent être neuly, bien marqué et parés 40 ka.
Article VII : Remboursement du prêt : Il peut se faire en nature ou en espèces selon les modalités définies par les deux parties. 1 sac d'arachide coque a 1.5 sac d'arachide coque ou son équivalent en espèce.
Article VIII : Dorée du contrat. Le présent Contrat prend effet à compter de la taite de livraiton des intrants par l'entreprise <i>ALMARA</i> et le remboursement des intrants par <i>LLM.C.M. ANC</i> au plus par le 31 Décembre 20.42
Article IX: Différends Pour tout litige né de l'interprétation ou de l'aviscution du présent accord, les deux parties s'engagent à chercher un régiement à l'amiable. Dans le cas échéant on pour faire recours aux juridictions compétentes.
Article XI: Dispositions Finales
Les deux parties s'engagent à respecter les obligations en foi de quoi elles apposent leurs signatures.
Fait à SAMARARA Le, 22. 1704. 2013
Entreprise Président (b) Monsieur _ Leadin + Jourson Monsieur (a) (16/12500551(25))
FEZATE SEMENGERE ANOMA BIP. 17239 NIAMEY - NIGER

This intervention has generated a high degree of success in terms of impact on women farmers. In 2007, the rate of knowledge of modern varieties was estimated at about 9.77%, the proportion of farmers who planted improved varieties was estimated to be 6.4% and the proportion of area planted to modern varieties was 2.3%. In 2011, farmers' exposure to modern varieties increased to about 73%, the proportion of farmers who planted modern varieties had risen to about 64% and 49% of groundnut area was planted with modern varieties.

Constraints

Though successful, limited access to breeder seed by private seed companies and farmers' associations is a major constraint. An interface between the public and private seed companies or local seed growers in the supply of good quality breeder seed is critical to make such a scheme work effectively. Government commitment to subsidize breeder seed production is a prerequisite for this.

Though interventions in the production sub-sector have been relatively successful, the processing and marketing sub-sectors are the main weaknesses in the groundnut value chain. To overcome these constraints, five clusters of women processors were formed and tasked with processing and marketing groundnut products in Dosso region.

Cluster-based approach targeting women to enhance groundnut value chains

Women farmers in Dosso region now have access to good quality seed and are producing good quality grains. A SWOT analysis revealed the following major upgrading options: (1) the consistent supply of high quality grains to processors, (2) the lack of proper equipment to process groundnut into oil, cakes or pastes, (3) the lack of training in business and marketing skills, (4) the lack of access to credit for working capital or trade, and the (5) the poor linkages to traders who can sell the products.

This led to the setting up of a pilot experiment as a proof of concept to enhance the groundnut value chain. Four clusters were formed in Dosso region, each with about 100 women processors. The cluster-based approach has the advantage of helping farmers/processors pool the demand for raw material and to sell the processed products collectively. Moussa Dey, Guidan Gaba, Sambera and Gaya villages were selected on the basis of the large volume of groundnut oil, cakes and pastes processed. Four other villages were selected as control sites with similar socioeconomic characteristics as the project villages but where groundnut is processed by hand.

The contract between ANFANI and the seed company AINOMA.



A woman in Guidan Gaba operating the groundnut processing machine.

Enabling better access by processors to high quality grains

Processors source the raw material from spot markets. Processors from Guidan Gaba purchase grains from the neighboring markets, especially the Malgorou market. Processors in Gaya source it from Tanda, Sia, Ouna, Malgorou markets and as far as Malanville markets in the neighboring Benin Republic. Grain supplied in the market varies in quality and price. During harvest in 2011, the price of a bag of groundnut was 10,000 FCFA/bag shelled. The price shot up to 22,000 FCFA/bag shelled in March/ April 2012. Such price variations pose significant threats to processing activities.

In order to address this constraint, producers of grain and processors met in Gaya region to ensure a consistent supply of 1,800 tons of seed to processors and reduce price variability. Formal contracts were signed between the two parties in each cluster. Contractual attributes that were taken into consideration were type of variety, cash or credit mode of payment; price set at 20% above the ongoing market rate at the time of purchase and the quality of the raw material (less than 2% physical impurities). These arrangements are currently being monitored to ensure compliance by the parties. However, to facilitate such contractual arrangements, access to credit was made important.

Improving access to credit for processors

Processing groups of Guidan Gaba and surrounding villages are poorly connected to credit institutions. They have had credit association with Assu Dendi. For example, the processing group Gani Kori Ji Ya in Guidan Gaba secured a loan of US\$ 2,600 at 12% interest for a 5-month period (25% annual interest rate). Similarly, the processing group of Gaya Town secured about US\$ 2,000 per group consisting of 10 women, with similar conditions.

Credit is not readily available and when accessible, it is of relatively low volume. The repayment period does not

match with producers' cash flows and they incur high costs fulfilling monthly payments due to the distance to the credit center.

The Project has established contact with the Agricultural Bank (BAGRI), and a rural project is ready to provide a guaranteed line of credit to BAGRI to the extent of US\$ 100,000. This will allow farmers to access flexible volumes of cheap working capital to purchase raw material and equipment.

Improving access to processing equipment

A need assessment on equipment showed that the lack of decorticators and processing machines were major constraints. On an experimental basis, the TL II Project supplied two mechanical decorticators and two small-scale oil processing machines in each of the five clusters. An ex-ante profitability analysis of equipment showed high returns to using these. Decorticators helped processors save on average 2.7 minutes/kg of groundnut decorticated and reduce costs by 2.5 FCFA/kg decorticated.

In addition, the use of processing equipment, especially milling, reduces time by 0.75 minutes and costs by 6.25 FCFA/kg. For oil extraction, processors gained on average 5.5 minutes and 18.75 FCFA/kg of groundnut shelled/ processed. The use of both decorticators and oil processing machines by processors reduces labor time by 22.2 minutes and costs by 27.5 FCFA/kg of groundnut shelled. Equipment is being monitored to keep track of its replacement by women processors.

Marketing of groundnut oil, cakes and paste

Access to markets of processed groundnut products is a major challenge for many groundnut processors in Dosso region. The major markets are those of Gaya, Dosso, Niamey, Baleyara and Malanville (Benin). There are no assured markets for processors who sell processed products such as groundnut oil, paste, cakes, Kuli Kuli, Digadigué and roasted nuts. All processors target the local market by selling to traders who in turn supply urban



A trained machine operator in action in Sambera.

markets. Often, due to lack of coordination individual processors sell the products without bargaining with traders, leading to low volumes and subsequently low sales, preventing capital accumulation.

Traders complain of poor product quality, especially groundnut oil. In some villages, processors often mixed groundnut oil with palm oil, reducing quality considerably and serving as a disincentive to purchase groundnut oil.

To circumvent poor access to markets, the project liaised with two large traders in Urban Niamey who have expressed interest in buying 5,000 liters of groundnut oil each per week. This translates into a demand for grains (raw material) of about 1,800 tons of groundnut shelled per year.

Management teams at cluster level

In order to ensure the sustainability of such interventions, a management team including the President of the women's association, the treasurer and the auditor in each cluster were trained in small-scale business and management skills. In addition, a man and a woman were trained in using the decorticator and processing equipment and making small repairs. During 2011/12, CDRMA, a processing equipment company and partner has been providing technical back-up in the use of processing equipment.

Monitoring and evaluation

Very simple data forms were supplied to equipment operators to collect information on the use of equipment, and the costs and revenues generated. This is being collected on a monthly basis by the project team.

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Website: http://www.icrisat.org/TropicallegumesII/ Bulletin-of-Tropical-Legumes.htm

Annex	Annexure 1. Groundhut seed production in Niger in 2011.											
Region	Department	Commune	Technical partner	Crop	Variety	Area (ha)	Seed class*	Yield (kg/ha)	Production (kg)	Quantity of seed available	Quality seed number	
Dosso	Boboye	Bellandey	FAO	Groundnut	55-437	3.9	R1	1360	5236	4,800	002-R1- 10-31-002	
Dosso	Boboye	Falmey	FAO	Groundnut	RRB	6.0	R1	1280	7680	7080	003-R1- 10-31-003	
Dosso	Boboye	Falmey	FAO	Groundnut	55-437	6.0	R1	2400	14400	13800	004-R1- 10-31-003	
Dosso	Dosso	Dosso	FAO	Groundnut	RRB	1.0	R2	300	300	200	002-R2- 10-32-002	
Dosso	Dosso	Dosso	FAO	Groundnut	55-437	10.0	R2	680	6800	5800	017-R2- 10-32-006	
Dosso	Dosso	Kargui Bangou	TL II-I CRISAT	Groundnut	55-437	0.5	R2	480	240	190	018-R2- 10-32-007	
Dosso	Dosso	Kargui Bangou	TL II- ICRISAT	Groundnut	ICG- 9346	0.5	R2	400	200	160	019-R2- 10-32-008	
Dosso	Dosso	Kargui Bangou	TL II- ICRISAT	Groundnut	RRB	0.5	R2	320	160	130	020-R2- 10-32-009	
Dosso	Dosso	Kargui Bangou	TL II- ICRISAT	Groundnut	RRB	0.5	R2	480	240	192	021-R2- 10-32-010	
Dosso	Dosso	Kargui Bangou	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	320	160	130	022-R2- 10-32-011	
Dosso	Dosso	Kargui Bangou	TL II- ICRISAT	Groundnut	ICG- 9346	0.5	R2	400	200	160	023-R2- 10-32-012	
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	0.5	R2	960	480	384	024-R2- 10-32-013	
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	1.0	R2	720	720	576	025-R2- 10-32-014	
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	1.0	R2	760	760	608	026-R2- 10-32-015	
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Annexure 1. Groundnut seed production in Niger in 2011.											
Region	Department	Commune	Technical partner	Crop	Variety	Area (ha)	Seed class*	Yield (kg/ha)	Production (kg)	Quantity of seed available	Quality seed number
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	0.5	R2	640	320	256	027-R2- 10-32-016
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	1.0	R2	320	320	256	028-R2- 10-32-017
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	0.5	R2	1120	560	448	029-R2- 10-32-018
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	0.5	R2	1040	520	416	030-R2- 10-32-019
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	0.5	R2	640	320	256	031-R2- 10-32-020
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	1.0	R2	360	360	288	032-R2- 10-32-021
Dosso	Dosso	Sambéra	FAO	Groundnut	RRB	7.0	R1	600	4200	3 60	033-R1- 10-32-022
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	0.5	R2	160,0	80,0	100	034-R2- 10-32-023
Dosso	Dosso	Sambéra	TL II- ICRISAT	Groundnut	RRB	1.0	R2	1000	1000	800	035-R2- 10-32-024
Dosso	Doutchi	Dankassari	Alhéri	Groundnut	ICG-9346	2.0	R2	500	1000	800	004-R2- 10-34-002
Dosso	Doutchi	Doutchi	Alhéri	Groundnut	55-437	5.0	R2	500	2500	2000	022-R2- 10-34-006
Dosso	Doutchi	Doutchi	Alhéri	Groundnut	55-437	15.0	R1	500	7500	6000	030-R1- 10-34-007
Dosso	Doutchi	Doutchi	Alhéri	Groundnut	55-437	2.5	R2	500	1250	1000	031-R2- 10-34-007
Dosso	Doutchi	Doutchi	Alhéri	Groundnut	55-437	4.0	R1	500	2000	1600	035-R1- 10-34-008
Dosso	Doutchi	Doutchi	Alhéri	Groundnut	55-437	1.0	R2	500	500	400	036-R2- 10-34-008
Dosso	Doutchi	Doutchi	LWR	Groundnut	RRB	10.0	R2	624	6240	6100	045-R2- 10-34-015
Dosso	Doutchi	Doutchi	LWR	Groundnut	55-437	5.5	R2	611	3360.5	3200	046-R2- 10-34-015
Dosso	Doutchi	Doutchi	LWR	Groundnut	ICG-9346	4.2	R2	439	1844.2	1700	047-R2- 10-34-015
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	Fleur 11	1.0	R2	720	720	504	048-R2- 10-34-016
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	Fleur 11	1.0	R2	600	600	420	049-R2- 10-34-017
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	RRB	1.0	R2	280	280	200	050-R2- 10-34-018
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	RRB	1.0	R2	240	240	200	051-R2- 10-34-019
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	Fleur 11	1.0	R2	640,0	640	448	053-R2- 10-34-021
Dosso	Doutchi	Guéchémé	FAO	Groundnut	RRB	1.5	R2	1 000	1 500	1 120	057-R2- 10-34-022
Dosso	Doutchi	Guéchémé	FAO	Groundnut	55-437	4.0	R1	448	1792	1 300	067-R1- 10-34-023
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Annexure 1. Groundnut seed production in Niger in 2011.											
Region	Department	Commune	Technical partner	Crop	Variety	Area (ha)	Seed class*	Yield (kg/ha)	Production (kg)	Quantity of seed available	Quality seed number
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	Fleur 11	6.3	R2	450	2839.5	2 200	068-R2- 10-34-023
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	RRB	3.2	R2	450	1426.5	1000	069-R2- 10-34-023
Dosso	Doutchi	Guéchémé	FAO	Groundnut	RRB	1.0	R2	320	320	100	070-R2- 10-34-023
Dosso	Doutchi	Guéchémé	Alhéri	Groundnut	55-437	15.0	R2	412	6180	4944	071-R2- 10-34-023
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	Fleur 11	1.0	R2	600	600	420	079-R2- 10-34-025
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	Fleur 11	1.0	R2	200	200	150	080-R2- 10-34-026
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	RRB	1.0	R2	160	160	100	081-R2- 10-34-027
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	RRB	1.0	R2	200	200	140	082-R2- 10-34-028
Dosso	Doutchi	Guéchémé	TL II- ICRISAT	Groundnut	Fleur 11	1.0	R2	920	920	644	083-R2- 10-34-029
Dosso	Doutchi	Koré Mairoua	TL II- ICRISAT	Groundnut	RRB	0.4	R2	343	120.1	100	084-R2- 10-34-030
Dosso	Doutchi	Koré Mairoua	TL II- ICRISAT	Groundnut	TS32-1	0.5	R2	40	20		085-R2- 10-34-031
Dosso	Doutchi	Koré Mairoua	TL II- ICRISAT	Groundnut	TS32-1	0.5	R2	44	22		086-R2- 10-34-032
Dosso	Doutchi	Koré Mairoua	TL II- ICRISAT	Groundnut	TS32-1	0.5	R2	80	40		087-R2- 10-34-033
Dosso	Doutchi	Koré Mairoua	TL II- ICRISAT	Groundnut	TS32-1	0.4	R2	343	120	100	088-R2- 10-34-034
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	0.5	R2	240	120	80	001-R2- 10-35-001
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	1.0	R2	640	646.4	450	002-R2- 10-35-002
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	240	120	75	003-R2- 10-35-003
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	1.8	R2	524	958.9	675	004-R2- 10-35-004
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	1.0	R2	320	320	200	005-R2- 10-35-005
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	1.0	R2	360	360	250	006-R2- 10-35-006
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	0.5	R2	720	360	250	007-R2- 10-35-007
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	800	400	275	008-R2- 10-35-008
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	0.5	R2	560	280	200	009-R2- 10-35-009
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	1.8	R2	337	599.9	400	010-R2- 10-35-010
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	320	160	100	011-R2- 10-35-011
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Annexure 1. Groundnut seed production in Niger in 2011.											
Region	Department	Commune	Technical partner	Crop	Variety	Area (ha)	Seed class*	Yield (kg/ha)	Production (kg)	Quantity of seed available	Quality seed number
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	1.0	R2	1200	1200	800	012-R2- 10-35-012
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	1.0	R2	280	280	200	013-R2- 10-35-013
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	1040	520	350	014-R2- 10-35-014
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	0.5	R2	400	200	150	015-R2- 10-35-015
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	J11	0.7	R2	342	239	150	016-R2- 10-35-016
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	640	320	200	017-R2- 10-35-017
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	ICG-9346	0.6	R2	533	319.8	250	018-R2- 10-35-018
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	0.5	R2	320	160	100	019-R2- 10-35-019
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	0.8	R2	526	399.8	300	020-R2- 10-35-020
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	Fleur 11	1.1	R2	381	400.1	280	021-R2- 10-35-020
Dosso	Gaya	Bana	TL II- ICRISAT	Groundnut	RRB	0.5	R2	320	160	100	022-R2- 10-35-021
Dosso	Gaya	Dioudou	TL II- ICRISAT	Groundnut	ICG-9346	0.5	R2	262.5	120.8	80	023-R2- 10-35-022
Dosso	Gaya	Dioudou	TL II- ICRISAT	Groundnut	RRB	0.4	R2	455	200	140	024-R2- 10-35-023
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	TS32-1	0.5	R2	800	400	280	025-R2- 10-35-024
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	55-437	0.5	R2	160	80	50	032-R2- 10-35-031
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	240	120	80	039-R2- 10-35-038
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	400	200	140	040-R2- 10-35-039
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	Fleur 11	0.5	R2	720	360	252	042-R2- 10-35-041
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	TS32-1	0.5	R2	240	120	80	049-R2- 10-35-048
Dosso	Gaya	Karakara	FAO	Groundnut	55-437	10.0	R1	450	4500	2960	059-R1- 10-35-058
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	55-437	0.5	R2	240	120	80	062-R2- 10-35-061
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	55-437	0.5	R2	120	600	70	064-R2- 10-35-063
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	J11	0.5	R2	720	360	252	072-R2- 10-35-071
Dosso	Gaya	Karakara	TL II- ICRISAT	Groundnut	J11	1.5	R2	347	520.5	350	080-R2- 10-35-079
Dosso	Gaya	Yelou	FAO	Groundnut	RRB	20.0	R1	498	9960	7000	082-R1- 10-35-081
											continued

Annexure 1. Groundnut seed production in Niger in 2011.											
Region	Department	Commune	Technical partner	Crop	Variety	Area (ha)	Seed class*	Yield (kg/ha)	Production (kg)	Quantity of seed available	Quality seed number
Dosso	Gaya	Yelou	FAO	Groundnut	RRB	20.0	R2	298	5960	4000	083-R2- 10-35-082
Dosso	Gaya	Yélou	TL II- ICRISAT	Groundnut	Fleur 11	0.7	R2	598	400.7	300	084-R2- 10-35-083
Dosso	Gaya	Yélou	TL II- ICRISAT	Groundnut	RRB	1.7	R2	275	478.5	335	085-R2- 10-35-084
Dosso	Gaya	Yélou	TL II- ICRISAT	Groundnut	TS32-1	1.1	R2	1052	1199.3	1000	086-R2- 10-35-085
Dosso	Gaya	Yélou	TL II- ICRISAT	Groundnut	Fleur 11	1.1	R2	618	679.8	500	087-R2- 10-35-086
Dosso	Gaya	Yélou	TL II- ICRISAT	Groundnut	RRB	1.0	R2	400	400	300	088-R2- 10-35-087

* R1= Basic/ foundation seed; R2= Certified seed.

Source: Ministry of Agriculture, Republic of Niger, 2012.