



Benga sebr Burkina Faso yīnga

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Gom-zugu

Seb-kānga maaname t'a na n yi zāmsg tuum-teoogo puta zāmsg yīnga, sēn yaa proze sēn boond ti AVEC BF sēn yaa zapō koodbala weooga ministērā sēn sōnge-proze wā sigla zāmsdo sēn na n sōng la a paas Burkīna Faso bēng koadba la bēng-bu koadba minim, b bāngre la b rabay, bōn-buudā la bēnga koob wēngē.

Zāmsga no-kēnda wusg la b sigl-yā ne INERA wā. Seb-kānga yiisgā tūu ne proze wā zāmsgā wakato. Seb-kānga pugē, goam wusg la b kumb-yā n maneg n wegse t'a wumbā yi nana. Foto rāmb wusg la b rigs-yā sebra yīnga. Yell bāmba fāa ya sēn na n sōng BF ka-koadb nins sēn get-b bēngā yelle. Sēn be seb-kānga pugē singda sig-noy kiuugu, ka-koadbā tuuma sēn wat n sung sōmb-sōmbo. Sebrā leb n wilgdame ti puta warb la a budbā ya a sigr kiuugā pugē. Putā zāab yaa sēoogo kiuugu la sa-sik kiuusa pusē bēnga taoosgo la a gūusgu yaa bōn-bwung la zī-likr kiuusā pusē. bēng koadba tōe n zāmsa kiuug fāa ne a tuuma b sēn sōmb n bānge n maane.

Haruki “Kabore-Batia” Ishikawa (Ph.D.)

IITA Saria, Burkina Faso.

IITA Kano, Nigeria.

Sên kēed ne proze AVEC-BF

Nand- nand ti sên keta pugda

Rëndame ti beng koadba, beng-bu getba, a tūusdba la neb nins fāa sên kēesd b mens beng a tuumd wēengē gād taaba n t ôog n yi noor a yembre n paam n bôeeg beng-bu sâamsa ti hal baa ka-koad bôonesa fāa n yuda tôog n paame. Būmb d sên ne beng a wēengē nin-sables tēms wīndg sên lutē la a tēng-n-suka wilgdame ti baa ne modgr nins fāa b sên maand beng a tuumd wēengē n tāag rūnda, beng-bu sōma wā paam n ta nin-sables tēms wusg pugē kēna maasa hal wusgo, lasōm bame ti b reng n ges n pids būmb ning sên paooge sên kēed neb nins sên getb beng a tuuma yelle.

Benga yaa ko-buugu sên be ko-buud a taaba taoore ne sômbalem. Ziis nins sên yaa randagre(zī-koēnga) n be nin-sables tēms wīndg sên tūtē la a tēng-n-suka la ti tōnd tēnga Burkina Faso be b suka, tēn-bāmba pusē b naagda beng a ne ko-buud a taaba wala kamaana, kazēega la baninga n kooda.

Benga kooba, yaa a ruba yīng n yiida; sên yud fāa a biisa. La a leb n kēesda laog kāsenga beng koadba yīnga t’a sên kēes ligd sōor zēk n ta Amerik tēng ligd dolaar milyaar 2.2 yuum (FAO2007-2009) pugē. Baob kāensa pugē, beng-bu tuulsa d sên taoosd rasem 70 pugē wā tōeeme ti d zab ne koma n koglg d rubā n pōs zuloeeese tēn-koura sên wat ne a soaba beng a moogra wakatā. Beng-bu kāens sōngda beng koadba t’a paasda b paongo b sên wat n vē ti beng biisa ligd wa rug n lebg toogo ti b yaool n na n koosa. Ne rē fāa beng-bu tuulsa IITA wā la tuum noyā a taaba sên tūusd beng-bu sōma wā sên ges n tum n yiisa kell n paa gōgdē n pa tat beng koadb nins sên dat-b beng a ye.

Proze AVEC-BF yaa IITA wā proze a yembre, zapô tēng gof neera sên sōnge sên na yilē n wa ne nao-kēnd paala ti beng a bôn-bu tuulsa bôeeg zīig zānga. Proze AVEC-BF sigla tuum kāsensa tāabo sên na yilē n bôeeg bāngr la minim.

- 1) Beng buuga tūusgu sên kēed ne beng koadba sên dat la b nonga soaba
- 2) Beng bu koadba sulla la b lagem-n taara paasgo sên na yilē n keng bôn-bu paala kōom b suka.

- 3) Puta kaorengo ne beng koadba sên na n song-b ti b bãng beng-bu sônga yôodo la b le paam rabay beng womb la beng tuum a taaba wêengê sên kêed ne neb nins fãa sên tumdb beng tuuma.

Ne tuum kâensa sên pa maneg n yaa toora, sên ya tilê n bakd proze AVEC-BF ne a taaba, yaa tuum buud toor-toor sên lagem taaba têng a ye b sên yâk pugê taky ligda yaa nana n kell n zemsdê la sakd ne tênga nin-buiidã tôogo.

Marsã proze wã baasga pugê tônd tôe n maneg n maana tuum buud toor-toor n paase, d têts nins b sên yâka pusê. Proze wã yuum a tãaba pugê pu-paal ektaar 50 la tônd beng-bu koadba sên paam-b zãmsga tall beng buug sên tar kaset sebre n ko. Kakoaadb 797 n tũ n zãms kakoaadb puta tuuma kaorengo n paam bângre koodã zãab rabay zugu ti ka-koaadb sôor sên ta 1500 sên be têts nins b sên yâka pusê la têts sên keg-b bamba sungame n kood beng-bu paalga IT98k-205-8 b sên boond ti Niizwe (Niizoe) (sên dat n yeel ne guremde ti kom saame) sên paasd lagem-n taar sên tũus bôn buud ninga ti koaadb 910 tũ n tume, beng buud a taab sôor sên ta a nu (5) n zoe n be sorê ti d na n bôeege. Proze wã tumdame yesa n yiisd bôn-bu paala sên yekd ne koadba raabo.

Wakat kãnga baa ne proze AVEC-BF tuuma sên tar yôod la a kêng taoora, sên pak n yuda yaa rabaar ning sên na n maan n paase ti ka-koadba ne beng-bu koadba la beng-bu tũusdba gãd taaba ti beng-bu sônga paam n bôeeg n ta a sên tog n taê la b le maan bôn-bu paal n kô baobg ning b sên datã. Tuumd sên pa baood tóg wusgo t'a sakr la a rabaar na sông ti zems tôe n yi tagsgo sên na n yilê ti beng-bu paala bôeege yi tao-tao tênga pugê sên tũud ne tênga ninbuiidã pântôogo. Baa têng fãa sên wa n paood n zem to-to, têng fãa ne a tuuma sên yaa soaba tôe n sônga wakat sên wate tônd Burkina Faso beoog neer la a taoor kënd yînga.

Seb-kãnga makda koadba sebr zalle ka-koadba yînga, sên kêed koadba puta tuuma kaoreng wêengê n na n sông-ba n paas b bângre beng koob wêengê. Baoob sulls véesdb kãsems toor-toor naagame n tum n yiis seb sên kôt kibay la tuum nao-kênda zãadba yînga. Ne sebr kãnga sên yaa proze AVEC-BF tuum teooga yembrã, tônd gëegdame t'a na n sôngame n nek ka-koadba ti b tall beng-bu sônga n tum ne rabay paala b sên paama n paas b lagem-n-taara pãnga ne neb toor-toor sên ning b toog proze AVEC-BF pugê wã.

Proze AVEC-BF ya sōm-mita sēn kēed ne sōngr ning b sēn sōnge ti d na n sōde ne b neba: tōnd kōata, zapō tēng kooba, weooga la zīma yēeb ministēera (MAFF), zamaan zēms sull ning sēn geta kooba yelle (IITA), tōnd tēnga sull sēn geta weooga la kooba veesg yelle (INERA), zapō tēng zooda sulli (JICA). Zapō tēng no-rēesa sēn be Burkina Faso, sullsa taab sēn tūmd b mensē, tōnd tēnga tūmd noor ning sēn geta bōn-buuda yelle (SNS) la tōnd Burkina Faso ka-koadba.

Proze wā wakata tōr fāa pugē, bi-pugla a ye singame n na n kēng kolēez yesa wēnd maag paoong sēn kēed ne beng-bu paala tūma. Tōnd saagda ne d sūur fāa ti bōm-bu koadb paala sēn be tēmsā pusē wā na n paama bāngre sēn kēed ne proze AVEC-BF sēn tall zāmsd nins tēmsa pusē wā la b sōng tēnga a beoog neer yīnga. Tōnd proze wā teelda Burkina Faso ne “AVEC-BF” wala a yūura meng sēn dat yeel ti būmb ninga.

The logo for AVEC-BF features the word 'Avec' in a black, cursive-style font, followed by 'BF' in a bold, black, sans-serif font. A green leaf-like graphic is positioned behind the 'V' in 'Avec'.

Satoru Muranaka (Ph.D.)

- Tropical agriculture research frontier -

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Twusgo

Benga ya bũmb b sɛn kood tɔnd zamaana wĩn-toog sɛn yitɛ la sɛn yud fãa tɛms nins saaga sɛn pa niidɛwusga, ti zĩ-bãmba la benga kɔt n yuda. Yuumd fãa pugɛ benga wuwaga b sɛn koode tɔe n zɛk n ta hektar (ha) tus kɛema 14 (14 millions) t'a biisa waooglem tɔe ta tond (toand) tus-kɛema a 4 la pu-suka (4,5 million de tonnes).benga ya neb nins sɛn vu-b we-kuremsã rub yɛgre, a le yaa galem-tɛmsa pusɛ neba pu-suk rub yɛgre t'a ledgda nemda zĩigɛ.ninsables tɛms wusg pusɛ, beng vãada ya b zɛedo. Nasaar tɛms wala Amerik tɛnga la nin-kɔodsa la nin sables tɛms neb nong n dɪta beng telma la beng-bi-maasa. Benga sɛn tar n maand rub buud toor-toor sɔor ya wusgo. Beng biisa tar n maanda bɛere, zɛedo, a rugda woto n wãbdɛ, a tɔe n naaga ne bũmb a to wala mui, zom, n dug n dɪ. Benga biisa tɔe n werame n maan ribda taaba.beng-pagda la a vãada n paas a fugda yaa rũmsa ri-nongre.

Ne benga sɛn sakd d zamaana pugɛ la a sɔmblma sɛn ta toto wã, benga pa kɔt wusg ye t'a segda zu-loees wusgo sɛn kɛed a zĩ-koodsa (zĩisa yaame, budba pa yɔkd sɔma ye) birga d sɛn ningd bilfu bɪd sɛn dag pa ningdi la tuma. Zuloees bɛd sɛn kɛed benga koob wɛengɛ ya a bɔn-yɪgdɪ wã (beng karensã, zũin-zuĩ wã, vũn-vũuda la beng-biisa). Benga bãase (beng suda, beng-wãoodo). Sɛn paasd rɛ yaa mo-yooda la beng-wɔonga n paas twulga la wara, la sɛn yud fãa kooba minin kaalem

Sebr kãnga wilgda nana nana yam la rabay buud toor-toore y sɛn tɔe n tum benga t'a yɪ sɔma n wa ne nafre. Rɛ tũuda ne puta kaorengo, beng koaadba sɛn naag taab n maan sulli bɪ sɛn tumd b yembre n tar bãngr bilfu. Benga twumda vũks toor-toora, zĩiga tũusgu beng buuga tũusgu, benga bĩngri wilgda sebra pugɛ vɛenega ti karemda tɔe n karem n wum a vɔore nana-nana. Beng koaadba tɔe n tũ rabay nins sɛn wilg sebrã pugɛ wã n tɔog n paam n naf b mense benga koob wɛengɛ.

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Kiuug fãa ne a tvvma



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Sig noy kiuugu

Yɛl buud toor-toore

Putā kaorengo bɛng
koaadba yĩnga

Bõn-buudã seglgo



Naag putā kaoreng bɛng-
koaadba

Putā kaorengo



**Ziiga manegr sɛn na n buda
yĩnga.**

Maane-y rōanda benga sɛn tog n kō
toto wā geelgo.

Pvuga ziiga yalem ya a wana ? Yāmb
zoe n noga kuga la y ke tusa bi? Bôe la
y bud ziiga pugě ruě ? **Benga ko n yilma
tōeeme t'a pa kō sōma ye.** Yāmb pa
tog n ko benga noor wusg zĩ-yeng pugě
ye.

Paam bāngr la rabaya

Naag n tũ putā kaorengo n yaool n sing putā seglgo.

Bɛng-koaadbã putā kaorengã pugě, sɛn zāmsd-b bāmba sɛn
paam zāmsg ningã ne zāmsd bɛda a taaba proze AVECBF
wɛɛngě wā wilgda bāngr la rabay bõn-buuda maaneg
wɛɛngě ; la b put ne taaba kibay ruě yuumdã tuuma sɛn yĩ a
soaba. Makre : benga kōo a wān toto ? Benga bu-bugo la b
bud-yã ? Bõn-buudã ligd yu wāna ? Bõn-buudã sɛn tar kaset
sebrã raa ye ? **kibay bāmba fãa yaa tɩlae sɛn na n sōng
rōanda tuumdã yĩnga a nafr wɛɛngě.**



Makre : Niizwe (Niizoe)

A yalē :

A buunga tuulem (rasem 60), bila bedlem zemsame, a tõe wôongo, a sên kôt toto 1000-1500kg ha a 1 pugě.

Bôn-buudā yākre :

Nand ti y bode, yāk-y beng-buud ning y sên dat n buda. Yīngr fotā wilgd-d la makre beng-bu sōng ning sên zems ne tond tēnga BF. Beng-buugā sã n yāk n sa, makre yel turs nīns sên pugda kēeda ne beng buuga yākr weengě. Yel-turs bāmba yaa wala beng bubo, b pāng ne bāasa, beng biisa bedlem, beng kũun sên yala la beng sōmblem. Yāmb sã n vui wala zīg nīng saagã sên pa niid n sekdě wã, bôn-bu tuulgã tõe n sōng-y-la koobã weengě n yuda.

Gũus-y ne bôn-buuda raabo :

Bôn-buuga sên tara kaset sebra yaa beng-koadb nīnsi b sên mi tiira nengě la tog n ti ra. Sōmbame ti y ra beng-bu sōnga INERA wã pugě, sã n mikame ti beng koadb a b sên mi tiir sãn pa pẽ ne yāmba.

Yāmb sên nan ko n paam toto tũuda ne yāmb bôn-buuda y sên buda sōmblma. Bao-y bôn-bu sōnga n ra, beng-bu yooda pa bund sōma, b pa womd sōma me. Yāmb pa tog n kīs sūd ne beng koadb la koosdb nīnsi sên pa tar-b bôn-buug ning sên tar kaset sebra ye.



Exemple

**Ra-y bôn-bu sōnga beng
koadb nins sên paam-b kaset
sebre.**



Exemple

**Makre ne bôn-buug sên tar
kaset sebre**

Bôn-buud sên tar kaset sebre ne bôn-buud sên ka tar kaset sebr ka a yembr ye. Beng buuga sên tar kaset sebre, ya budba yīng bala, la ser vis ning sên get-a beng-buudā yelle tōnd Burkina Faso wãn mi a tiiri a sōmblema weengě. Beng-bu bāmb pa rub yīng ye, la beng biis a taaba yaool n yaa riiba yīng, la sên paasd me pa sên na n bud ye ti b pa na n yi sōma ye. Yāmb patog n tall beng-bu zaalga budb yīng ye.

Yāmb tog n raa beng buug ning sên tarkaset sebre beng-bu koadbāā nengě wall bi sên kôt-b yāmb beng-bu kãnga nengě.

Sigr kiuugu

Yel buud toor-toore

- Warbo

- Budbo



Wënd na ning-y barka

Tën-gāonga seglgo



Rūm bīnda birga

Bao-y birg ning sēn pōog sōma, sān ka rē a tōe n sāama bengā yēga.



Nasaar birga :

Ra-y nasaar birga ne nins y sēn tar kaset sida. Yāmb tōe n paamame ti koobā taoor dāmb pug-y n ges yāmb birga raab wēngē. La sēn yud fāa bao-y vēnem kooba tuum getba nengē
DRAHRH/DPAHRH

Tën-gāonga seglgo:

Saagā sã n ni sōma ti tēnga woug sōma bi y war tēnga ti kē sōma ne wāka, bi ne rūms.

Wāka wall ne mansīn koadga. Benga yēga kēeda tēnga, rēnd b rata tēnga sēn bugse. Woto bengā zīg tog n wame ti bus tēnga sōma n sakd beng yēga kōom. Kuga ne tusā tog n yāgsame.yāmb togame n ges birgā sān ningame ti yaa sōma ti y yaool n bude. Moog birga 2,5t/ha bi nasaar bīrga 100kg/ha yāmb tog n yedga birgā ti fāa yi a yembr puuga zīg fāa.

Sōmbame yesa ti y gudg-a ne wāka t'a bus tēnga ti kaalma ludi



80cm rulg ne a to svka. Vusma
40cm bud-bok ne a to svka.



Budbo :

Budbã tog n yi saasa belem wakato, makre wala sigr kiuugã pu-svka n dadb sēoog kiuugã singre, sēn tūud ne yāmb sēn be zīig ninga. Nand ti yāmb bude, y tog n deng n kalma beng buuda ne tum b sēn wilg yāmba sãn mikame ti bēnga na n ka kalme ne tum. Bēng-bu tvulga sēn pa tēed-a wã, sēn zēmsa dasem (60-65) tog n budame n bas vusem sēn zēms (40cm) ne taaba ti rulsa me yalem zēms (60-65 cm). Bēng-buug a taaba me vusem zēms (40 cm) ne taaba ti b rulsa yalem zēms (80 cm). Yāmb sãn na n bode, bi y ning ti ta beng bēel a tãabo bud bok fãa pugē sēn kēed ne rulsa vusem.



Koglo:

Bōn-buuda sōmb n koglg sōma ne tum sēn na yil n koglg-a ne bāase, ne bōn-yo-yigdi wã. Sã n ka rē bōn-yo-yigdi wã tōe n sãama a biisa ti b nan pa ta bulb ye.



Bōn-buuda waooglem sēn zēms ne zūga yalem:

12-14kg 1ha yīnga. La tog n yi beng buug nīng sēn tar kaset sebre.



Wakat bugo la y sōmb n bode ?

Saag sã n ni sōma ti tēnga wovge 15mm bi yud rēnda.

Sěoog kiuugu

Yel buud toor-toore

- Sěbda luvsgo la b woosgo
- Mooga koobo la zabr ne bñn-yo-yıgdi wã



Sěoog kiuugã yaa tũm
toogã meng-meng wakato

Luvsgo la woosgo



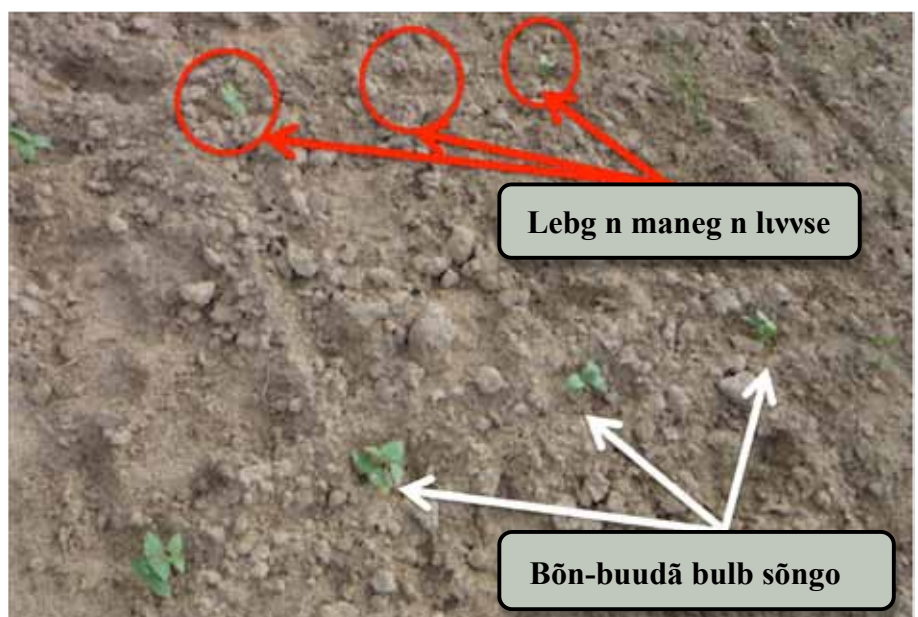
Luvsgo la woosgo:

Rasem a yopoe (7) poore bi y ti gilg n ges puvgã, ti sãn pa yı sũma bi y luvse. Woto me tũe n woos n basa beng yęg a yiib (2) bud-bok fãa pugę. Beng buuda sãn pa kalem ne tum sũma, bñn-yıgdi wã tũe n sãm-b lame gũus-y n gese bñn-buuda sã n bula sũma y puvgę wã.



**Bñn-yood sãn sãmnd bengã biisi la
b yęga :**

Yãmb sã n maan kvung ne bengã tum kalengo, bñn-yood toor-toor sãn sãmnd beng biisa bi beng yęga nan sãmama y bengã ti b nan pa buli wall bi b bulba poore.





Zabr ne mo-yoodã :

Zabr hakuk ne mo-yoodã sōngdame ti bēnga tōog n yik sōma la b wom sōma. Tall-y pān-tōog n zā y puvgā t'a yi yolemde. Rasem 14 pugē bi y modg n ko pipi koobā. Rasem 21 poore bi y leb n ko naoor a yiib soaba. **Ra yim-y ti puvga moog sã n pa ko sōma, bengã womb woogda hal wusg ye.**

Zabr ne bōn-yo-yıgdı wã :

Bēnga sã n wa yik n sa ti war maan bilf bala, la beng-karensã sēn yōkd bēnga. Beng karensa (Aphis-craccivora) yaa yel-kāseng sēn kōt bēnga. Bēnga sãoong a tōe n toeemdame. Wara wakato bōn-yo-yıgdı wã sã n paasd tao-tao n dabda. Beng-karensa wata ne bāas biis wusgo. Wakat kãnga bi y mao n tall ti-puusdgã n puus bōn-yo-yıgdı wã n k v.



Aphid-Aphis spp.



Ti-puusdga pōmpa ne ti-pōmpdma:

Tuma pompa talldame n sãeeg tuma bēnga zut puvga pugē. La ti-pōmp yooda pa zēed sãoong ye. Mao-y n ning ko-yulemde ti-pōmpa pugē-ti puusma ya sōma la a leb n yaa wēng ne ninsaal laafi wã. Yãmb sã n na n puus y bēnga bi y koglg y meng ne teedo la y zã te-bãmb me sōma



Tu ma kalemda wãn-wãna:

Ning-y tuma bidu pugē koom litr 16 la y paas tuma 32ml n kalme.

Sa-sik kiuugu

Yel buud toor-toore

-Zabr ne bôn-yıgdi wã la
bãase

-Birga paasgo



Gũus-y ne bôn-yo-yıgdi
wã sãoonga

Zabr ne bôn-yo-yıgdi wã la bãase



Maruca:

Bôn-yo-yıgdi wã biis sãoong
tõnd beng puuda la beng telma
zut paasda ne bôn-yo-yıgdi wã
sõor la b pãnga. Rẽ me woogda
benga sãn tog n kô toto wã.

(Photo: Dr. M. Tamò, IITA-Benin)

Zabr ne bôn-yo-yıgdi wã la bãase :

Sa-sik kiuuga pugẽ benga yikda sôma, la yaa bôn-yoyıgdi
wã la bãasa paasg wakat me. Sãn yud fãa bôn-yoyıgdi
wã sãoonga kũdame ti benga sãn da tog n kô toto wã
boog wusgo. Yaa tile ti d puus benga ne tum sãn na yı lẽ
n yals benga sãoongo.



Tuma kalengo yaa Desis ml 32 la Titã ml 40 n yaool n kalem ne ko-
yilemd litr 16. Tuma puusgã yaa budbã poor rasem 32 yĩnga. Yãmb
sã n suiid ko-rẽgd y tuma pômpa pugẽ, a tõe n sãama tao.



Birgā paasgo

Birga tall n tuma ne birga sēn pa ning bengā kūun yaa toor-toore. Birga ningra yaa sōma bengā puub wakato t'a paasda bengā wombo. Birga raab yaa zu-loεεga ligda wεεngē. La d sã n yaool n tall birga n tum sōma ne d bengā a na n woma wala sēn segde.

Zabr ne mo-yooda yasa

Tōnd sã n maan kuung ne mooga koobo, a na n di tōnd birga noosem n paam pānga. Mooga koob tog n yī sōma n tall pānga.



Bôn-yo-yıgdi sēn fōsd beng telma:

Bôn-yo-yıgdi nins sēn fōsd-b beng telma tara pāng ne beng telma sãoongo. D tõe n yānda b kãsemba beng yēg a taaba zutu.



Skarabe rāmba:

Bengā skarabe rāmba rułga b mens ne beng puuda la b wat ne sãoong hakuka beng yēga zutu. b sōora sã n yaa wusg beng puuga pugē, b kitdame ti bengā pa tol n wom ye.



Strips rāmba:

B rūmda beng puuga n fōog sēn be a pugē wã. Sãoongã sa n tall pānga, bengā tõeeme n pa tol n wom ye.

(Photo: Dr. M. Tamò, IITA-Benin)

Bõn-bwung kiuugu la zî-likr-kiuugu

Yel buud toor-toore

- Benga taoosgo
Benga pâbre bi a sogbo
- Benga bîngri



Modg-y wakat fãa n
gũusdë

Benga zãab taoosga wakat la taoosga poore



**Beng talem nins sën pa kvi-ba n
wat ne benga pukra :**

Yãmb sãn taoos benga, y tog n
yedgame, y pa tog n sãm-b taab zug ye-
y sãn sãm-b taab zutu, b tõe n
sãamame.



Benga pâbra ne nuga:

Maane-y gũusgu n da pâb beng
beela n wã ye.

Taoosga :

Benga taoosg tõe n yi pînda yãmb sã n zã y pvugã
sõma, la y sã n ninga beng-bu tvulga y pvuga pugë.

Makre niizwen (niizoe) y toë n taoosa y benga, y sã
n wa mik ti beng-telma wala koabg pugë sën kvi
wã ta 80-90. Beng koeemsa tõe n pâbame n yelg ne
nugu. Yãmb tõe n taoosa y benga naoor a yiib bi a tã
la rë tũuda ne y beng buugã. Sõmbame ti y taoos
beng-koeemsa la y bas beng maasã ti b sãn wa kvi b
pâbra yaa toogo ti leb n woogd beng a sõor la a
sõmblem.





Bengã pãbr bi a sogbo :

Benga tog n kvi sõma pvuga pugě ti y yaool n taos-ba. Naoor wvsg pugě beng-telma sên pa kvi sõma wã kitdame ti y le maneg n yedg-a sõma rasem a yiib bi a tãabo n yaool n pãbe yãmb tõe n pãba y benga ne nug wall bi ne mansîn. D sên minim n maand ne nugu yaa d sên samd benga taab zugu n bao ra-saar n pãbde, la y gũus n da wã beng-beela ye. Yãmb sên na n pãb y benga toto fãa bi y gũus n da wã beng-beela ye. Yãm sã n pãb n sa n na n yelge, bi y tod sebga sên na yil ti sebga kãag benga-pedsa la a bas beng biisa ti y paam n kok bũmb pugě.

Benga zãabo pãbra poore :

Maasr benga pugě tog n pa ta 11% ye. Sãn yaa ne beng-buuda koobo y tog n tũusa beng-pedsa la bõn-yood a taaba n base. Yedg-y benga ze-yolemd pugě. Gũus-y ti kuga la te- yaals ra paas y benga ye.rě poore y benga sã n wa kvi sõma, puglda ne yondo sên na yi t'a bĩgra yi sõma. Gũus-y ti yaa yol-paal la y tog n bao la y sõng ti yonda ra madg koom ye. Sên na yil ti benga ra puki y tog n sēba yonda noya ti bõn-wãbdsa la bõn-yĩgdi wã ra wa sãam ye.



Benga pãbr ne mansîni:

Mansîn dãmb ya toor-toore, bed la bõonego n suiid lesãns, gazol bi n tumd ne kurã.



Benga yelgre:

Benga yelgdame n tũud ne sebga sên teesdē sên na yil ti sebã loog ne beng pedsã n paas-rēgd sên be benga pugě.



Bengã tũusgu:

Tũus-y beng-bi bõonega, beng-pedsa la beng-bu kōbg toor-toora. Beng-bu neera raag ya soma.



**Bõn-yo-yıgdi wěnsa
sěn sāmmb bēnga yell
gesgo taoosga poore**

**Maane-n gūusg la y zā y
laogā sōma**

Bēnga bīngri :

Bēnga sã n bīngri, bõn-yood wusg n nong n sāmmd-a.yel-kasemsa tãaba yaa : pukra beng-bīisã la yōensa. Bēnga sã n yaool n sãame, tı yāmb rug-a n nan rı a ka le noom ye, n paas me neba pa le raad-a sōma ye.

Bõn-yo-yıgdi wã :

Bõn-yo-yıgdi ning sěn sāmmda a bīngra wakata yaa beng-biisa n yuda. Yaa bengra pugê la a bila be n rılgda menga n wa tol n lebg bõn-yıgdi n pusg n yıgd marsã.



Yōensa :

Yel-kāsems toor-toor a tã la yōensa sāmmd bēnga a bīngra wakato. B wãbda bēngã sōma n woogdê, b pedsda kēer n sāmmdê la b wurd yondã n sãeegd bēnga tēnga.





1. Vees-y mana wã sôma n ges a pa tar bogdo. Bog-bila a yembr meng tõe n kutame ti y bengã bingra pa yi sôma ye, n tõe n sãam y bengã.



2. Põd-y pipi mana wã n dik a yũb soaba n sui pipi mana wã pugẽ.



3. Ruk-y mana a tĩab soaba n sui a yũb soaba pugẽ, la y sui bengã n pids marsã.



4. Yũs-y pemsem nĩng sẽn be mana a tĩab soaba pugẽ wã y sã n tõe la y maan boto ne a taaba.

Bengã bĩngra zãada wãn toto

D rik nao-kênd nana sẽn na n pugl d bengã ne sak pics sẽn pa ning tum ye. Sak pics sõngdame ti d zab ne beng-biisa la d kogl d bengã ti ta kiuus a yoobe bi yud rě.



1. Bengã sã n wa pelg n kvı bi y zoe tao-tao n taoose ti rě sõngdame ti bengã ra kě biis ye. Yãmb sãn taoos bengã tao, a pa kěed biis woto ye.

2. Kuvıis-y bengã sôma wĩndgẽ la sebgẽ. Bengã maasrã sãn waoogẽ a woogda bõn-yo-sãamdı wã pãnga. La y gũus ti saaga la meenema ra madg bengã ye.

3. Yãmb sã n dat n bĩng bengã t'a kaoos bi y tũus bengã sôma la yulemde. Sĩd-y bogd bi võy nins fãa sẽn na n yilẽ n da bas vıwugo bõn-yo-yıgdı wã la yõensa yĩng ye. Yãmb sẽn na n sui bengã zĩig ninga sã n wãag wall bi wurgi, bi y mao n sě-a ti bõn-yo-yıgdı wã la yõensa ra tũ ben sãam y bengã ye.



4. Sagles nins b sẽn wilg yãmba na n sõng-y lame ti y mao n bĩng y bengã sak pics rãmb pusẽ (ges-y foto wã).

5. Rıgl-y bẽdse n gũusd yõensa, sẽn paasde yũusa la baasa tõe n sõng n riga yõensa ti b zãag ne rooga. Y tõe n rıglga yõens tum me.



* Sak pics : gũus-y ne yon-togsenda. b pa sôma ye. FASOPLAST rěnda la sôma y sẽn tõe n da (tel : 50 31 51 06)

Annexes

Sě̃n sōmb ti paase

1. Birgã sě̃n maand toto

2. Bōn-buudã koosg wεεngê



International Institute of Tropical Agriculture (IITA)

www.iita.org

A wān toto la y tõe n maan birga ?

Benga pa maneg n baood birg sɛn tar noosen woto ye, t'a kokda noosma a toor pemsmɛ wã. Wakat kãnga tɛms nins tɛnga noosem sɛn pa waooga, sɔmbame ti y paas bir-pɛɛlga nasaara rɛnda sɛn tɔen ta 15kg sɛn na yulɛ ti benga wom sɔma. Y sãn ning nasaar bir-pɛɛlga wɔsg me, beng vaãda na n fɔumame n yaool n pa kɔ biis sɔma ye. Burkina Faso ka, tɛnga pa maneg n tar noosem wɔsgye, rɛndame tid sɔng tɛnga ne nasaar birga bi bir-moaaga ti benga tɔog n wom sɔma. Kooba ministɛera tõe n sɔng-y lame ti y paam n ra nasaar birga.



Nasaar birga :

NPK 14-23-14 +5s +1B2 O3 : woto wilgdame ti bir-kãnga tara noosem buud toor-toor a (5) nu.

A ligda w 3400-4600 50kg yolga.

*Goofneera sã n sɔnge a ligda boogdame n lebɔ w 2300-w 3000 50kg yolga.

A ligda sãn wa ka ta boto bi y bãng ti pa bir-sɔnga ye.

Ya a togsengo

Wakat nĩnga birga waooglem ka mi n sekdɛ ye. INERA wã wilgame ti 1ha pugɛ bi y ning bir-moaaga 2,5t bi nasaar birga 100kg. Nasaar birga ligd ya toogo ti neb kɛer mi n nong n maan a togsengo. Sɔmbame ti y ra y birga mangas y sɛn tar kaset sɪd pugɛ. Nasaar birga sɔngda beng a t'a wom sɔma y birga ningr sã n yɪ wala sɛn segde.

Bir-moaaga me sɔngda beng a t'a yik sɔma n tob n yɛdg sɔma. Y tõe n ra bir-moaagã wala y sɛn tõe n maan-a y toore. Rɛnd gom-zu-raoog kãnga wilgda birga sɛn maand toto, la bɔe la y tõe n tall n maan birgã? Birga maaneg rikda kiuusa tãabo. Rɛnd yãmb tõe n zoe n singa y birga maaneg yɔum-vɛkr kiuuga pugɛ.

Bir-moaaga tõe n maana zīg fāa

Pipi vūka :

Wuk-y rūmsa bīnda n naag ne tēnga tom n bīngi. Woto me y na n wura mooga n kurs-b bōneg-bōnego.



Vūka yiib soaba :

Kalme-y rūmsa bīnda ne toma ne mooga. Rē poore maane-y rol-bila, ning-y koom wosg a zugu n zāgs t'a kē taaba. Yulme-y boto naoor a yiib bi a t̃aabo.



Vūk a t̃aab soaba

Lud-y roya ne mana sabelle n koglg a maasra ne a tvulma. Lebzd-y roya la y zāgs-a rasem piig la a naase (14) fāa la y kell n lut-a ne mana sabella.



Vūk a naas soaba

Yāmb sã n tū vūks a naasa fāa kiuuga t̃aab pugē y na n mikame ti y birga pōogame. **Bir-sōngo yaa birg ninga sēn pōoga wā.**



Bõn-yěgr sën be a pugě ti y na n dik la woto :



Benga raaga kēeda ne yěsgo b sã n ges yãmb benga ra-sãndlma, wakat ninga b sãamda benga sōmblma b yonda suiib pugě, koaadba ne ritba suka ti wat ne zu-loees buud toor-toore. Saaga niiba la benga womba me tõe n teka benga ligdi. Woto wã raada togame n sak yěsgã. Rě wã yãmb paoonga tũuda ne yěsga sën na n yi a soaba, y paoonga toě n woogame me. D sã n leb n na gese koaadba sōmb n bānga benga raaga, beng ninga b sën date, la beng sōor b sën baoode ka-koaadba sōmb n naaga taab n maan sulli wall bɪ b yembr-yembre n tum ti benga yi sōma ti b sã n wa baoodê bɪ yi bāmb beng koaadma. Woto n tõe n kut ti raadba sã n wa baood beng bɪ b tõe n kō kaset sid ne bāmba. Sën na yilě ti beng koaadba raab pīdi bɪ b naag taab n kě yěsg pugě la b ko beng sōngo sën tar sōmblem la b maood n paasd b benga sōmblema pānga ti rě n wat ne a raaga sōmblem.

Bõn-yëgr sën be a pugë ti y na n duk la woto

Bõe la yāmb tog n maane ?

- Geelg-y bēnga tūmdā, laog ninga y sën tog n kēesa pugë wā. Makre : birga ligdi la tuma ligdi.
- Yāmb sã n na geelge bi y bīng ligd ninga y sën kēes bēnga tūmda pugë wā sebrā ti da menem ye.
- Guls-y y sën ko n paam kilo wā sōore.paoonga sōmb n yuga y sën kēes ligd ninga wā
- la y mag y yōodā n gese.

Client	Prix de unitaire	Quant	Total
Moussa SAWADO	250CFA	2.5kg	625 CFA
Noufou KABRE	250CFA	10kg	2500 CFA
Rene NANEMA	250CFA	5kg	1250 CFA
Usumane KABRE	250CFA	40kg	10000 CFA
.....			
Total			14375 CFA



- Sard rikre :
- Wakat bugo ?
 - Ne ānda ?
 - Kilo a wāna ?
 - Ne wāna ?

Bāng-y bēnga zislem, a waooglem la y yaool n koos y bengā

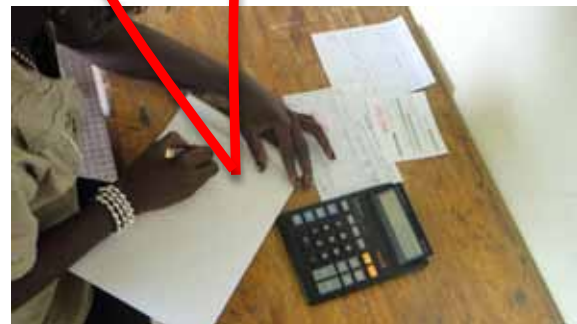
Koosgā maanda wān-wāna ?

- Bao-y raag sën ta y yam la raad sōngo.
- Yāmb sã n koos y bēnga ne neda bi y maan sebr n bīngi.
- Maane-y sullsi y koosga yīnga la y naagd-y taab n yēsd ne raadā.

2010 yvumde bēnga yorba laag ligdi 2.8kg

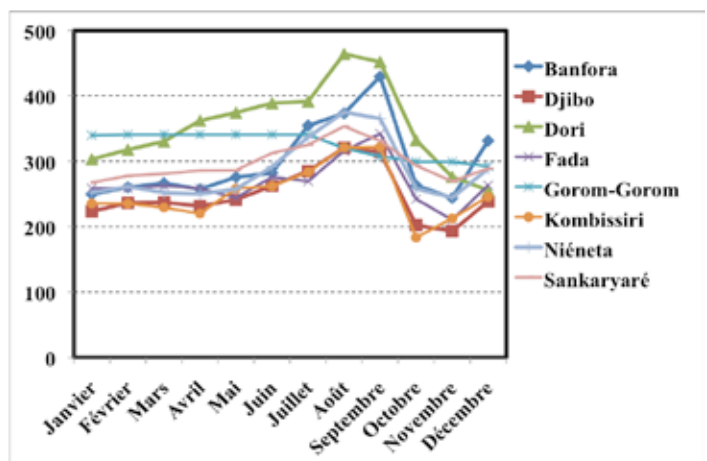
Expense	Designation	Prix de unitaire	Quant	Total
	Fertilizer	23000 CFA	100kg	46000 CFA
	Chemical	15000CFA	5L	75000 CFA
	Spade	2500CFA	1	2500 CFA
	Seed	600CFA	3kg	1800 CFA
				
Total				125300 CFA

Yield	Variety	Ha	Kg
	IT98K-205-8	0.7	320
	KVx61-1	0.2	210
			
Total Yield			530Kg



Wakat bugo la y tog n koos y bēnga?

- Bēnga ligd toeemdame n tūud wakatsā.
- Yāmb sã n tar rabay sën tōe n bīng y bēnga bi y bīng n tāag wakat ning bēnga ligd sën wat n roge.
- Bi y ra yīm bēnga bīngr zu-loeesa la y ges y sën na n koos y bēnga wakat ninga.



Pousem

I.Y. Dugje, L.O. Omoigui, F. Ekeleme, A.Y. Kamara, and H. Ajeigbe. (2009) “Farmers’ Guide to Cowpea production in West Africa” IITA, Ibadan, Nigeria. 2-17pp

H.A. Ajeigbe, S.G. Mohammed, J.O. Adeosun, and D. Ihedioha. (2010) “Farmers’ guide to increased productivity of improved legume-cereal cropping systems in the savannas of Nigeria” IITA, Ibadan, Nigeria. 3-7, 67-77pp

Bar puusom

Seb-kānga yaa proze wā veēnom << beng bu-paala keēsgo (koōm) ninsable tēms nins baobg pugē saasa sēn pa niid n sekdē-wā. Beng-bu tuulā sēn be burkina Faso (AVEC-BF) zapō teng koaba , weooga la zīma yēeb ministēera sēn sōnge (MAFF).

Tōnd datame n puus zapō tēng no-rēesa sēn be Burkina, Zapō tēng zooda sull sēn be Burkina Faso (JICA) nonglem hakuk zooda ne tond yīnga.

Tōnd leb n puusda Dr Manuelle Tamo (IITA-Benin) sēn tall nonglem nedo n kō-d bōn-yegdi wā foto rāmba ti d naag n yiis d sebrā.

D kell n puusda a Katherine Lopez la Mr. Atser Godwin (IITA-Ibadan) b sōngre la beb-kānga kibar bōēegr yīnga, d puusem le b n bee ne Dr. Nieyidouba LAMIEN la Dr. Korodjouma OUTTARA (INERA/Saria) b nonglem la zood sīngrā yīnga. D wilgda d yel- sōmminimne ne Mr.Vincent O. Nanema la Mr Rene T. Nanema seb kānga lebgr ne moora yīnga. Tond bark puusem bee ne Mlle Honorine Kaboré, a Mr. Moussa Sawadogo, a Mr Noufou Kabré, a Mlle Mireille W.Yameogo (INERA/Saria) b kēes-m-meng seb-kānga tuumda pugē yīnga.

D wilgda d yel-sōm minim ned beng-koaadba sēn be bēnga prize wā sēn tumd ziis ninsa fāa pusē : a Mr. Babou Nagalo (Pouni), a Mr. Souleymane Bationo (Pouni), a Mr. Norbert P. Sawadogo (Samboaga), a Mr. Eloi Sawadogo (Samboaga) a Mr. Souleymane Tapsoba (Laongo), a Mr. Adama Tapsoba (Laongo), a Mr. Salam Nonkre (Yako), a Mme. Aminata Nonkre (Yako), a Mr. Lamine Belem (Titao) la Mr. Yamba Komi (Titao) b bāngr la b minim puub d sēn paa m b nengē n paas b tagsg la b skre seb-kānga lebgr ne moora wēegē. D barka puusem kota INERA zaka sēn be Saria tum-tumdba fāa gilli b sōngra yīnga.

