

ISSD PLUS PROJECT LOGFRAME

Project Strategy	Key performance Indicators	Baseline	Target	2017	2018	2019	2020	Means of verification	Assumptions/ explanations
GOAL: Improved food & nutrition security, and agricultural economic development.	Area planted with quality seed	0 acre	300,000 acres	50,000 acres	75,000 acres	100,000 acres	75,000 acres	<ul style="list-style-type: none"> ▪ Calculation method based on seed sales ▪ Mathematically calculated based on the seed rate and the volumes of seed sold per crop, area aggregated for all crops 	<ul style="list-style-type: none"> ▪ Area planted with quality seed enhances ecologically sustainable food systems ▪ Farmers desire to use good agronomic practices ▪ target: 1 acre per farmer
	Additional agricultural production of grain equivalent as a result of using quality seed	0MT	87,500 MT	13,000 MT	35,000 MT	65,500 MT	87,500 MT	<ul style="list-style-type: none"> ▪ LSB Seed sales data and yield verification data ▪ Mathematically calculated based on volume seed sold & yield difference between home saved seed and quality seed, per crop; volume aggregated for all crops 	<ul style="list-style-type: none"> ▪ Farmers produce more food with the use of quality seed, which will partly be used for home consumption and partly to sell for income ▪ Agricultural growth will take place as a result of increased productivity based on improved seed subsector ▪ Targets are cumulative
	Amount of food produced that prevents and treats major micronutrient deficiencies in Uganda (MT)	HIB 200MT OFSP 0MT	HIB 1,360MT OFSP 840MT	HIB 240MT OFSP 120MT	HIB 320MT OFSP 180MT	HIB 400MT OFSP 240MT	HIB 400MT OFSP 300MT	<ul style="list-style-type: none"> ▪ LSB seed sales records ▪ Mathematically calculated based on iron rich and Vitamin A rich planting materials sold 	<ul style="list-style-type: none"> ▪ children, mothers and other vulnerable individuals are known to suffer from deficiencies caused by consumption of diets that are low in Iron and Vitamin A (http://www.who.int/nutrition/topics/micronutrients/en/ and https://tinyurl.com/y9st9odn) ▪ High iron bean (HIB) varieties contribute to reducing Iron deficiencies ▪ Orange Fleshed Sweet Potato (OFSP) contribute to reducing Vitamin A deficiencies

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	Number of people employed as result of LSB and vegetable activities	0	TOTAL: 46 % ♀: 35	a. 0 b. 20 c. 10 d. 0	a. 6 b. 20 c. 10 d. 5	a. 6 b. 20 c. 10 d. 5	a. 6 b. 20 c. 10 d. 10	<ul style="list-style-type: none"> ▪ a) LSB Association records; b) OSP reports; c) Seed company reports on demos & in-depth training d) Vegs Innovation project progress reports and Company interviews/ report formats 	Employed staff continue to work for employer, also after the project <ul style="list-style-type: none"> a. LSB associations: 6 staff b. OSPs: 20 staff c. Vegetable Seed company staff: 10 d. Seed companies and Vegetable Innovation projects: 10
Outcome 1: 300,000 households increase productivity, income and resilience	No. of households improving their productivity and income by using quality seed	0 HH	300,000 HH	50,000 HH	120,000 HH	225,000 HH	300,000 HH	<ul style="list-style-type: none"> ▪ LSB crop & vegetable seed aggregated sales data and mathematical calculations ▪ LSB logbooks ▪ Seed company reports ▪ Aggregated from output 1.1, 1.2 and 1.3 	Use of quality seed increases productivity Increased productivity enhances income; Increased income from quality seed enhances resilience through investment and diversifying income Note: households include seed users (QDS, certified, vegetables) and seed producers (QDS) Targets are cumulative
	Income (net benefits): difference between cost of production and price.		147 billion UGX	25 billion UGX	59 billion UGX	110 billion UGX	147 billion UGX	<ul style="list-style-type: none"> ▪ Mathematical calculation method based on using indicators from 1.1, 1.2 and 1.3 	Targets are cumulative
Output 1.1: Smallholder farmers increased productivity from use of quality seed for crop production	Number of farmers using quality seed for crop production		300,000	50,000 HH	120,000 HH	225,000 HH	300,000 HH	<ul style="list-style-type: none"> ▪ Calculation method based on seed sales (extrapolation) ▪ Mathematically calculated 	Each LSB serves 1000 farmers Targets are cumulative
	Difference in productivity from using home saved seed and quality seed (yield benefit quality seed in Kg/hectare)	-	Legume: 500 Cereals: 325 OS: 700 R&T: 5000	Legume: 500 Cereals: 325 OS: 700 R&T: 5000	Legume: 500 Cereals: 325 OS: 700 R&T: 5000	Legume: 500 Cereals: 325 OS: 700 R&T: 5000	Legume: 500 Cereals: 325 OS: 700 R&T: 5000	<ul style="list-style-type: none"> ▪ Yield verification plots ▪ Average for crop group ▪ R&T – roots and tubers ▪ OS – oil seeds 	Average yields cover differences in productivity due to weather conditions

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1.1.1: Sale of QDS and certified seed at convenient and diversified outlets (seed fairs, weekly village markets, agro-dealers etc)	Number and type of outlets	0	1000	25	250	500	1000	Uptake component reports	Sufficient volumes of preferred QDS varieties are locally available; Annual variations possible between types of sales points depending on effectiveness of each outlet type; In total 250 subcounties estimated. Each subcounty, 4 different outlets Targets are cumulative
1.1.2: Create awareness on the benefits of farmers using quality seed (road shows, demos, radio, tv etc)	Number and type of awareness raising activities held	0	6000	250	2000	2000	1750	Activity reports from Omnicom, uptake component and vegetable awareness activities	USTA & private sector SC are willing to partner with ISSD on awareness campaigns; Choice of types of awareness raising activities depends on effectiveness
1.1.3: Stimulate effective demand for quality seed among smallholder farmers (value chain integration, small packs, seed demand studies)	Types of demand pilots initiated	0	15	0	5	5	5	Activity reports	<ul style="list-style-type: none"> Successful pilots can be scaled Recommendations from studies taken up by policy makers private sector and practitioners
Output 1.2: LSB members increased QDS productivity and income	Number of LSB farmers producing and selling QDS	2163	7500 % ♀: 30	5000	6500	7500	7500	LSB logbook	Each LSB has 20-30 members Total LSBs is 300 Each LSB serves 1000 farmers
	Difference in productivity of seed production as a result of support provided to LSBs (technical training, ISFM, irrigation, climate smart agricultural practices etc) (yield benefit in Kg/hectare)	Legume: 463 Cereals: 813 Oil seeds: 475 Tubers: 6875	Legume: 863 Cereals: 1250 Oil seeds: 1000 Tubers: 8750	Legume : 500 Cereals: 850 Oil seeds: 525 Roots & tubers: 7063	Legume: 575 Cereals: 925 Oil seeds: 600 Tubers: 7438	Legume: 688 Cereals: 1050 Oil seeds: 750 Tubers: 8000	Legume: 863 Cereals: 1250 Oil seeds: 1000 Tubers: 8750	<ul style="list-style-type: none"> Individual LSB member logbooks (sample/selected farmers) ISFM trial data Log books of LSBs involved in ISFM trials Planting returns Average for crop group 	Average yields cover differences in productivity due to weather conditions; Activities to support QDS productivity are climate smart; Legume group includes beans and green gram; Oil seed group includes groundnut, sesame and soybean; Cereals includes rice, millet and sorghum; Tuber group includes potato
	Income (net benefits) per ha per hh per year: difference between cost of production and price (gender disaggregated)	1,000,000	1,750,000	1,750,000	1,750,000	1,750,000	1,750,000	<ul style="list-style-type: none"> Average income per hh Individual LSB member logbooks (sample/selected farmers) 	LSB members sell all QDS produced as seed, not grain; Using beans as the seed enterprise with the lowest gross margin; Increased investment in productivity enhancing inputs; Increasing effective demand for seed; Stable macroeconomic factors

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	No. of upgraded LSBs that are sustainable in terms of profitability of LSBs	0	75	0	35	55	75	LSB production and sales data; Cost Benefit analysis at LSB level; LSB turnover records; Increase in yield per acre; Yield impr strat -ISFM activities	QDS is institutionally embedded and LSBs are recognised entities; Profitability calculated basing on cash costs in seed production
	% of female LSB members who indicate an increase in level of acceptance of their decisions at home regarding the seed business	-	% ♀: 50		25%		50%	Qualitative surveys	ISSD household approach promotes joint decision making which enhances women's ability to make decisions on seed business. First round of information will be collected in 2018 hence there is no baseline figure
	Number of women in LSBs top leadership positions (LSB chairman, committee chairman)	40	225	200	225	225	225	LSB leaders' records	GALS trainings encourage more women to take up top leadership roles; GALS trainings improve men's attitudes towards women as leaders
	Changes in attitudes towards women participating in LSBs							Case stories	Changes in attitudes by male LSB members and spouses
1.2.1: Support and train additional LSBs to produce and market QDS	No of LSBs supported by out scaling partners	-	200	150	200	200	200	• OSP Progress reports Key informants, LSB monitoring	OSP continue to support LSBs after first year of ISSD co-funding
1.2.2: Support LSBs to increase productivity and improve business management practices (training, innovation grants, LSB associations, infrastructure grants, linking to BDS, GALS methodology etc)	Number of participants in training and type of trainings provided	-	945 % ♀: 35	0 % ♀: 35	525 % ♀: 35	280 % ♀: 35	140 % ♀: 35	Training reports	By end of 2018 and 2019, a total of 35 and 55 LSBs respectively will be upgraded. LSBs that are qualified as upgraded do not go through further trainings in the years that follow; Trainings have been planned in 7 modules as highlighted in the upgrading training manual. For 2018, all 75 LSBs go through the 7 modules.
	No. of LSB associations providing coordination and support to LSBs	-	6	1	3	6	6	LSB association quarterly reports	The LSB Association should be supporting at least 50% of LSBs in its zone

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Output 1.3: Vegetable growers increased productivity and income using high input-high output production systems	No. of vegetable producers using advanced varieties.		32,000 % ♀: 35	400	11,900	24,600	32,000	<ul style="list-style-type: none"> Sales records from host farmers (demo plots) Seed company sales records Field day attendance lists 	Trained producers adopt the improved production system; Vegetable producers are making the required additional investments in advanced vegetable seed; Varieties can handle biotic conditions; Trained trainers are applying the skills to train farmers
	Difference in productivity of high-input high-output vegetable systems and low-input low-output vegetable systems. (yield benefit in MT/Ha)	-	Tomato: 12.5MT Onions: 2.5 Cabbage: 12.5MT EP: 2.5MT	Tomato: 0 Onions: 0 Cabbage: 0 EP: 0	Tomato: 5MT Onions: 1.25MT Cabbage: 5 MT EP: 1.25MT	Tomato: 10 Onions: 2MT Cabbage: 10MT EP: 2MT	Tomato: 12.5MT Onions: 2.5MT Cabbage: 12.5MT EP: 2.5MT	Harvest and sales records from host farmers (demo plots) and related extrapolation Average for selected vegetables EP – Egg plant	Average yields cover differences in productivity due to weather conditions Activities to support vegetable productivity are climate smart As a result of training and awareness support provided to vegetable farmers)
	Income (net benefits) per hh per crop cycle: difference between cost of production and price (gender disaggregated)	-	1.25M UGX per household	-	0.5M UGX/ hh	1M UGX/ hh	1.25M UGX/ hh	Harvest & sales records from host farmers (demo plots) and related extrapolation; Average income per hh Training evaluations and reports.	Vegetable producers have a market for their products Every household is producing ¼ acre of vegetable For 2017, no trainings were conducted for farmers
1.3.1: Skilling farmers on improved vegetable production practices (in-depth training, training of professionals)	Number of vegetable producers receiving training at the sites	-	20,000 % ♀: 35	1500	6000	7500	5000	Attendance records Training reports; Training evaluation records	Vegetable producers are willing to attend the 5 sessions of training; Trainees give genuine feedback on training received
	No. of sector professions trained	-	100 % ♀: 35	25	50	50	25	Attendance records Training reports	Sector professionals are interested in the TOT program
	No. of training sites set	-	800	0	300	300	200	Site Inspection reports; Physical inspection of sites; Activity records; Pictures	

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1.3.2: promote use of advanced vegetable varieties by private sector (variety demonstrations, field days, campaigns, radio shows etc)	No. of variety demonstration sites	-	320	10	120	130	60	Demo-plan records; Inspection reports; Activity reports; Visitors book; Pictures	Vegetable growers habitually visit the demonstration plot
	No. of vegetable farmers attending the field days		12,800	400	4800	5200	2400	Field day attendance records; Field day reports; Pictures	Vegetable growers attend the field days; A field day is organized at each and every demonstration-site
Outcome 2: Strengthen seed sector institutions and environment	Efforts by different stakeholders to stamp out fake seed	37 (2015)	50	-	-	-	50	TASAI reports- only baseline and endline	Scoring 0 -100; 100 highest
	EBA seed quality control index	3	5	-	-	-	5	EBA report; only baseline and endline	Scoring between 0 and 12 – 12 highest (http://eba.worldbank.org/data/exploreconomies/uganda/2017)
Output 2.1: QDS institutionally embedded	% of seed samples complying with set minimum QDS quality standards	-	80%	60%	75%	80%	80%	Seed test results Record of QDS labels issued	No baseline figure was put because the targets are set for the new groups (200) which are not yet at the standard of the 100 groups from the old project. The annual targets indicated are therefore more representative of what can be achieved from both old and new groups
	No of DLGs integrating the QDS system (activities and budget) in their annual planning	0	28	6	9	8	5	Copies of DLG financial year work plan and budgets	
	NSCS coordinates seed inspection and issuing of labels	-	All 300 LSBs inspected	30	180	250	300	field inspection reports; Seed testing reports; NSCS audit/ monitoring reports;	Baseline figure is not indicated because more than half of the 300 groups are new hence a baseline figure would have only included the old groups which is not representative. Seed inspected: planting returns submitted; 2 field inspections per season; Seed tested in lab:

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2.1.1: Train, coach and coordinate DAOs in new zones on QDS regulation and quality assurance	No. of DAOs trained	-	200 % ♀: 15	100	100	-	-	DAO training reports	2 people trained per district (DAO & AO)
2.1.2: Support development of decentralized seed testing capacities	Number of regional seed testing lab initiatives supported	0	4	1	1	2	4	Regional lab MoUs	Public institutions will fully take it running of labs
Output 2.2: Increased availability of quality assured EGS	Volume of foundation seed produced annually	0	80MT	20MT	30MT	50MT	80MT	Foundation seed production records and reports	
	Proportion of foundation seed fields inspected and meeting minimum standards	-	30% inspected, 75% meets minimum standards	10% 50%	25% 60%	25% 70%	30% 75%	MAAIF-NSCS records; EGS producer records % of area under FS production	There is buy-in by NARO and MAAIF in EGS quality assurance; EGS producers submit planting returns to MAAIF
	% of LSB foundation seed demand met	-	75%	25%	35%	50%	75%	Production & marketing records of EGS producers; foundation seed orders	Difference between volume booked and purchased.
	Number of LSBs & SC using the pre-booking system	-	100 LSBs 10 SC	20 1	50 5	75 8	100 10	Production records of EGS producers	SC = seed company
2.2.1: Operationalise quality assurance for foundation seed including tracking & tracing system	System rolled-out and operational	-	System rolled out	Agreed procedure	2 pilots	4 pilots	Roll-out	Reports on pilots conducted EGS component reports	Operationalising includes three steps: stakeholders Agree on procedure, pilot, roll-out of system
2.2.2: Forecast, plan & coordinate EGS demand, production & marketing (LSB association, training companies and LSBs, NARO, pre-booking system etc)	Number of LSB associations that are effectively coordinating foundation seed demand with NARO		6	3	3	4	6	Reports from LSBs NARO reports	Every zonal LSB association is supported to do this by the end of ISSD Plus LSB Association supporting at least 50% of LSBs in its zone
2.2.3: Pilot initiatives for foundation seed production (FSE, Individual member, LSB and ZARDI)	Number of initiatives tested		4	0	2	2	0	Key informants Pilot reports	Regulations favouring to diversify FS production; USTA, NARO and MAAIF are willing to collaborate with ISSD on EGS production FSE = foundation seed enterprise

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Output 2.3: Seed sector challenges innovatively addressed and seed sector knowledge embedded	Type of seed sector related policies/regulations influenced by ISSD		3	-	-	-	3	Meeting/workshop reports Stakeholder interviews (qualitative)	These will include; -QDS regulations -EGS quality assurance guidelines -Guidelines on Phytosanitary standards for vegetable sector
	Extent to which stakeholders are actively taking up roles to strengthen seed sector							Stakeholder interviews (Qualitative)	M&E framework for MSPs to be developed and rolled out in 2018
2.3.1: Innovation projects- novel solutions to sector bottlenecks (vegetable, QDS, uptake)	Successful innovation projects addressing bottlenecks and mainstreamed	-	9 veg 16 Uptak 10 QDS	4 veg 0 Uptak 0 QDS	5 veg 8 Uptak 4 QDS	0 veg 8 Uptak 6 QDS	0 veg 0 Uptak 0 QDS	Stakeholder Interviews Proceedings of policy related meetings. Innovations reports	Embassy study highlights the key bottlenecks. Addressing of bottlenecks will increase the demand for quality seed.
2.3.2: Lobby and advocate for cabinet approval of national seed policy, and support for QDS & EGS options and vegetables	Number of meetings/workshops on policy issues	0	23	1	5	8	9	MAAIF-NSCS records; minutes meetings	There is political will to approve QDS regulations and other seed related policies; meetings with parliament, Directors MAAIF, influencers; includes vegetable component
	No. and type of information materials disseminated	0	50	5	10	15	20	Material printed	Newsletters, ISSD Policy briefs, fact sheets
2.3.3: Organise regular zonal and national MSPs (including national seed stakeholder meetings)	Number of MSPs conducted annually	-	41 (Total)	5	12	12	12	MSPs meeting reports	Both for food crops and for vegetable growers. For vegetable component, MSPs are used to disseminate results from innovation projects, TOTs etc
2.3.4 LSB-OSP and vegetable farmers skilling approach embedded within relevant existing institutions	Number of institutions approached for embedding	-	8	0	5	2	1	Discussion reports Stakeholder interviews	There are institutions with the potential to take on methodologies within their mandate

Calculation Methods for estimating selected PROJECT key performance indicators

Number of households improving productivity and income: This will be calculated basing on seed sales and seed use per farmer per season. A mathematical formula which was used in the previous ISSD Uganda project will be adopted. The KPI is calculated as seed sales divided by the seed use per farmer per season. The seed use values per season are based on the ISSD baseline report on farmers' access to seed and other planting materials, ISSD 2014.

Area planted using quality seed: This will be calculated basing on seed sales and seed rate per crop. A mathematical formula which was used in the previous ISSD Uganda project will be adopted. The KPI is calculated as seed sales divided by seed rate.

Additional agricultural production of grain equivalent: Similarly, this will also be achieved mathematically as the product of i) Area planted (as calculated above); ii) Yield difference from using quality seed and farmer saved seed and iii); Cereal equivalent per crop group. The cereal equivalent figures used are sourced from FAO's Food Composition Tables for International Use - www.fao.org/docrep/x5557e/x5557e04.htm .

Additional income from using quality seed: This KPI will be calculated as the product of the Additional food produced as a result of using quality seed and the average price of food. Average price of food is calculated by deducting cost of producing food from the Average farmgate price. Average farmgate price figures are collected monthly from a service provider (Infotrade Uganda LTD)