SIGAR | Office of the Special Inspector General for Afghanistan Reconstruction

June 9, 2014

The Honorable Tom Vilsack
Secretary
U.S. Department of Agriculture

Dear Mr. Secretary:

Thank you for your response to my inquiry letter dated April 17, 2014, concerning the Soybeans for Agricultural Renewal in Afghanistan Initiative (SARAI) funded by the U.S. Department of Agriculture (USDA). After examining the materials that you provided, I'm concerned about the viability of the project and the apparent lack of analysis and planning performed prior to the project's initiation. I'm most troubled by the following issues:

- The USDA confirmed that soybean production in Afghanistan has not met expectations and that there are doubts concerning the long-term sustainability of a soybean processing factory built as part of the project.
- The project's implementer, the American Soybean Association, did not conduct feasibility or value-chain studies prior to initiation of the project in 2010.
- Scientific research conducted for the UK Department for International Development between 2005 and 2008 concluded that soybeans were inappropriate for conditions and farming practices in northern Afghanistan, where the program was implemented.
- Despite the lack of prior planning and analysis, and despite evidence that may have put the success of the program in doubt, USDA provided $34.4 million in commodities, transportation, and administrative funds to ASA for SARAI.

I understand that Afghanistan's operating environment poses daunting challenges for reconstruction and development programs, and that any project in the country is bound to meet its fair share of difficulties. However, what is troubling about this particular project is that it appears that many of these problems could reasonably have been foreseen and, therefore, possibly avoided. Moving forward, I recommend that you take the following actions prior to any further investment of U.S. government funding in SARAI:

- Implement a thorough and comprehensive evaluation of the project's future sustainability, including a review of existing research on the economic viability of growing soybeans in Afghanistan. If a viable business case cannot be supported, withhold further investment.
- Develop an in-depth plan to address the deficiencies and challenges already identified.

Additionally, I recommend that USDA thoroughly review the process by which the Food for Progress program evaluates project proposals and makes its final selections.

I thank you for your cooperation in this matter. Should you have any questions, please contact my Director of Special Projects, Mr. Jack Mitchell, at [redacted] or at [redacted].

Sincerely,

John F. Sopko
Special Inspector General
for Afghanistan Reconstruction

Attachments: I: USDA Response to SIGAR-14-51-SP Inquiry Letter
II: Third-Party Evaluation of SARAI
III: SIGAR-14-51-SP Inquiry Letter: USDA Soybean Program

ATTACHMENT I: USDA RESPONSE TO SIGAR-14-51-SP INQUIRY LETTER

USDA

United States Department of Agriculture

Farm and Foreign Agricultural Services

Foreign Agricultural Service

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Washington, DC 20250-1001

FAS

Mr. John F. Sopko
Special Inspector General
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MAY 13 2014

Dear Mr. Sopko,

The Foreign Agricultural Service (FAS) has received your letter regarding the Soybeans for Agricultural Renewal in Afghanistan Initiative (SARAI), and in particular the soybean processing facility that is owned by the private investor who paid for its construction but is used in the SARAI project. As discussed, accompanying this letter are the official documents needed to obtain a comprehensive understanding of the SARAI project. Please feel free to contact me if more extensive information is desired.

Sincerely,

Suzanne Palmieri for
Phil Karsting
Administrator

Enclosures

Response to Special Inspector General for Afghanistan Reconstruction (SIGAR)

Soybeans for Agricultural Renewal in Afghanistan Initiative (SARAI)

Description of Project and Justification

In July 2009, the American Soybean Association (ASA) submitted a proposal to USDA that requested funding under the Food for Progress program. The following paragraphs were provided by ASA within its proposal.

"The American Soybean Association's WISHH program (ASA/WISHH), in collaboration with Shelter for Life (SFL) and Nutrition and Education International (NEI), propose a multi-prong agricultural development program that will contribute to the trilateral U.S.-Pakistan-Afghanistan efforts of improving food security, water management and watershed rehabilitation, and agricultural trade corridors. Proposed activities also support needs most recently stated following the June 2009 G8 Foreign Ministers Meetings, including promoting sustainable agricultural development, watershed rehabilitation, promoting the role of women, improved infrastructure and more efficient market access, capacity building, and credit availability.

ASA/WISHH proposes a three year program reaching over 400,000 people with nine activities supporting four objectives. The four objectives include, i) increase the production capacity of targeted farmers through renovated irrigation systems, access to micro credit, and technical support and training, ii) increase farmer access to markets through road rehabilitation, iii) increase capacity to process and sell locally produced crops, contributing to the creation of sustainable business opportunities, and iv) improve the nutritional knowledge and status of targeted community leaders, health sector workers, food processors, vulnerable individuals, and end users

Description of the Need for the Proposed Program

Afghanistan is a country with grim development indicators. The under-five mortality rate is the second worst in the world, only behind Sierra Leone. Maternal mortality is also among the worst in the world. In 2007, life expectancy was a mere 44 years. UNICEF's State of the World's Children 2009 reports that 54 percent of children under five suffer from moderate or severe stunting, and that 33 percent of children under five are moderately or severely underweight.[1] The Afghanistan National Development Strategy (ANDS) states that, "…almost half of the Afghan population is unable to purchase a basic food basket to provide 2,100 calories consumption per day."[2] In addition to insufficient caloric intake, micronutrient deficiencies are widespread (especially for iodine and iron) as is inadequate diet diversity. Findings from the 2007 National Risk and Vulnerability Assessment (NRVA) indicate that 42 percent of the population survives on about US$14 per month, or

[1] UNICEF, *The State of the World's Children 2009*, pg. 122
[2] Government of Afghanistan, *Afghanistan National Development Strategy*, pg. 28

less than 50 cents per day.[3] UNICEF notes that when various key indicators in health, education, and water and sanitation are compared across all provinces, "Baghlan ranks 32nd overall; the worst province in the country." Takhar ranks 24th overall. On average, each member of a rural family consumes 3.4 kilograms of flour each week. Adding soy flour to wheat flour could greatly contribute to improving nutrition.

Agriculture is of paramount importance to Afghanistan, representing 50 percent of the country's GDP and supporting 85 percent of its people. Securing water for agricultural and personal use is a challenge, however. According to the Afghanistan National Development Strategy, "Prior to 1979 some 3.3 million hectares were cultivated under various irrigation methods, compared to the 1.8 million hectares now being irrigated."[4] In addition, "water constraints inhibit cultivation of up to one third of irrigated land."[5] The Ministry of Rural Rehabilitation and Development notes that an average of only 19 percent of households in Baghlan have access to safe drinking water, while in Takhar this number increases to 29 percent of households. Farmers also have challenges in securing credit for necessary implements.

Poor roads are a real challenge in Afghanistan. In Baghlan, about 40 percent of roads are accessible year round, while 32 percent of roads are accessible only during some seasons. In Takhar, 43 percent of roads can handle car traffic year round, while about 30 percent of roads are accessible to car traffic only part of the year. In both areas, however, nearly a quarter of the province has no roads at all.[6]

Due to decades of conflict, much of Afghanistan's agro-processing industry was destroyed, draining physical assets and human know-how. The country currently imports over 90 percent of the vegetable oil that it consumes each year, mainly from Pakistan, Malaysia, United Arab Emirates, and other neighboring countries. Providing support to oilseed stakeholders will contribute to job creation and improved food security."

Overview of Grant Agreement

In FY 2010, USDA signed a Food for Progress agreement with the American Soybean Association that would support the Soybeans in Agriculture Renewal of Afghanistan Initiative (SARAI). USDA modified the agreement in 2010 and twice in 2012 to approve adjustments in the commodity sales process, the donation of commodities, and activity descriptions and targets. USDA provided a total of $34.4 million of commodities, associated transportation, and administrative funds through this agreement.

The following information is included in the grant agreement and describes the objectives of the project, progress measures, and specific activities. USDA is currently considering a

[3] Ibid, pg. 27
[4] Government of Afghanistan, , *Afghanistan National Development Strategy*, pg. 84
[5] Ibid, pg. 88
[6] Ministry of Rural Rehabilitation and Development, Provincial Development Plans for Baghlan and Takhar, www.mrrd.gov.af/nabdp

request to modify the grant agreement in order to address the challenges facing the project and to enhance the prospects for longer term sustainability. If approved, the descriptions of objectives, progress measures, and activities may change.

"(a) Activity Objectives

Monetization

ASA will monetize 13,750 MT of soybean oil, and, over a period of approximately three years, use the proceeds from such sale to implement the following activities in Afghanistan:

- **Renovate or Construct Irrigation Systems and Rehabilitate Farm-to-Market Roadways** to allow for greater water flows to reach targeted fields and to connect agricultural producing communities to provincial, regional, and national markets.

- **Provide Micro-credit** to support the extension of credit for the purchase of agricultural inputs and facilitate income generating trade that will complement food production and marketing.

- **Provide Technical Support and Training** in the production of soybeans as a rotation crop.
- **Provide Marketing Assistance** to develop, package and market various foods produced by a newly-established protein processing facility.

- **Establish an Oilseed Association** to bring together multiple stakeholders, including government representatives, producers, processors, wholesalers, traders, and academics.

- **Establish a Protein Processing Facility** to process soybeans into flour.

- **Conduct a Consumer Awareness Campaign** to increase knowledge of general nutrition and the health benefits of soy.

- **Conduct Cooking Seminars and Support Bakeries** to increase nutritional knowledge and ability to utilize soy in cooked foods, including *naan* bread.

- **Conduct Nutrition Impact Surveys** to determine the nutritional impact on those individuals who are participating under a direct feeding activity.

- **Conduct Feeding Trials** to determine the most efficient feed for poultry.

Direct Distribution of Soy Flour

During the first year of activities under the agreement, ASA, through its subrecipient, distributed 80 metric tons (MT) of defatted soy flour to 5,000 vulnerable, pregnant, or lactating women and their families during the winter months. Each family received 4 kg of soy flour per month for a period of four months (120 days per year). This ration provided on average 22 grams of soy flour per person per day.

Barter of Soybeans and Direct Distribution of Soy Flour

ASA will process 2,000 MT of soybeans annually over three years (6,000 MT total) through a newly established, self-contained protein processing facility that it will purchase with monetization proceeds under this agreement. ASA will arrange for Sustainable Appropriate Local Technologies International (SALT) to manage and monitor the facility. The 2,000 MT of soybeans that will be processed annually through this facility will yield approximately 950 MT of low fat soy flour annually. From this amount, ASA will barter 450 MT of soy flour each year with processors to cover processing costs.

ASA will dispose of the remaining 1,500 MT of soy flour (500 MT of soy flour annually) as follows: ASA will distribute a total of 250 MT of soy flour (160 MT will be used for two winter rations and 90 MT will be used in cooking seminars) over a period of three years. ASA will provide the remaining 1,250 MT of soy flour to the United Nations World Food Program (WFP) as a donation, or to another identified non-governmental organization(s) (NGO) through a subgrant, or both, for distribution to vulnerable populations in Afghanistan.

ASA will provide a ration of soy flour to 5,000 vulnerable, pregnant, or lactating women and their families for a period of four months (120 days per year) during two additional winters. A woman will be eligible to receive rations for one, two, or three winters, provided that she is vulnerable, pregnant, or lactating during each winter in which she receives a ration. ASA will also distribute soy flour to 10,000 vulnerable, pregnant, or lactating women at ASA-sponsored cooking seminars. The distribution will consist of the soy flour that is used during the actual cooking seminars as well as soy flour that will be given to each vulnerable, pregnant, or lactating woman at the conclusion of each seminar for home use. The cooking seminars are part of an ASA effort, funded through monetization proceeds, to instruct vulnerable, pregnant, or lactating women on the proper utilization of soy flour in the home production of *naan* (local style bread), as well as the various ways that soybeans can be prepared and consumed."

"**Table I**
MONETIZATION

Activity Objectives	**Type and Number of Beneficiaries**	**Progress Measures**
Renovate or Construct Irrigation Systems and Rehabilitate Farm-to-Market Roadways	-Direct: 15,000 farmers and unemployed laborers	**Outputs:** -Mobilize or establish one agricultural extension and water management committee in at least six communities

	-Indirect: 75,000 farming family members and unemployed laborers	-Rebuild and rehabilitate six irrigation systems -Improve 35km of tertiary access to market roads -Employ 320 unskilled laborers, each for a period of eleven months -Inject $866,000 in local markets through provision of cash-for-work employment **Outcomes** -Improve the productivity of the land by at least 100% -Provide irrigation water for 6 communities -Increase the purchasing power of 320 families by 400% -Enhance agricultural trade by 50% -Increase farmers' income by 50% by the end of the second harvest -Increase farmers' income by an additional 5% beyond the third harvest
Provide Micro-credit	-Direct: 800 farmers and artisans - Indirect: 4,000 family members of farmers and artisans	**Outputs:** -Provide 800 loans, at an average of $400/loan, for agriculture-related activities that increase the return on locally produced crops and livestock **Outcomes** -Increase income of the participants by an additional 25% by the second harvest -Increase income of the participants by an additional 5%-10% beyond the second harvest
Provide Technical Support and Training	-Direct: 9,000 farmers -Indirect: 45,000 family members of farmers	**Outputs** -Develop a curriculum for trainers and trainees -Train 30 core trainers and 3,000 farmers per year -Establish and institute a system for measuring yields in five percent of farms monitored -Establish approximately 90 demonstration plots **Outcomes** -Increase quantities of soy grown from approximately 500 acres to 4,500 acres -Increase yields by 30 percent

Provide Marketing Assistance	-Direct: 250 staff or employees of targeted companies -Indirect: 500 staff members or employees of targeted companies	**Outputs:** -Conduct 22 technical assistance visits -Conduct 6 technical seminars -Provide technical assistance to established protein processing facility **Outcomes** -Increased knowledge of soy -Increased demand for soy products -10 companies will utilize soy in their commercially available products
Establish an Oilseed Association	-Direct: 250 producers, processors, wholesalers -Indirect: 5,000 farmers	**Outputs** -Establish and register one national oilseed association **Outcomes** -Association established and registered, with strategic plan and membership structure in place -Association offering services of value to members -Association able to recover costs for services
Establish a Protein Processing Facility	- Direct: 23 employees and 1,000 contract farmers -Indirect: 5,115 family members of employees and contract farmers	**Outputs:** -Procure, transport, commission, and staff a protein processing facility -Institute standard operating procedures and production schedule -Develop and process products for commercial sale **Outcomes:** -Protein processing facility is sustainable and profitable -At least three products are developed and are being sold commercially
Conduct a Consumer Awareness Campaign	-Direct: 150,000 consumers	**Outputs:** -Complete a consumer awareness campaign **Outcomes:** -Increased consumer awareness about the benefits of soy -Increased soy consumption
Conduct Cooking Seminars and Support Bakeries	-Direct: 10,000 pregnant, lactating or vulnerable women* -Indirect: 50,000 families of pregnant, lactating or vulnerable	**Outputs:** -Organize cooking seminars for 10,000 pregnant, lactating or vulnerable women -Support start-up of 20 women-owned community bakeries **Outcomes:**

	women	-Increased knowledge of general nutrition -Increased knowledge of the nutritional benefits of soy -Increased soy consumption -20 women-owned bakeries operating commercially
Conduct Nutrition Impact Surveys	-Direct: 300 pregnant or lactating women and their families	**Outputs:** -Build one set of surveys and protocols with training materials for nutritional impact measurement and food distribution acceptance and uses -Conduct training for two teams of 10 data collectors -Conduct baseline and follow-up data collection annually on approximately 300 selected beneficiaries -Provide outcome reports annually **Outcomes:** -Maintenance or improvement in nutritional impact indicators for targeted beneficiaries -Improved utilization by targeted beneficiaries of the foods distributed -Improved knowledge by targeted beneficiaries of the nutritional value of foods distributed
Conduct Feeding Trials	-Direct: 6 targeted farmers -Indirect: 10,000 farmers	**Outputs:** -At least six poultry feeding trials completed **Outcomes:** -Best poultry feed formulation determined and information disseminated -Increased used of soybean meal in feeds

DIRECT DISTRIBUTION

Distribute Soy Flour	-Direct: At least 10,000 pregnant, lactating or vulnerable women* -Indirect: At least 50,000 family members of pregnant or lactating women	**Outputs:** -Distribute 8.5kg of soy flour to 10,000 pregnant, lactating or vulnerable women following their participation in cooking seminars -Distribute 4 kg of soy flour for winter family ration to 5,000 pregnant, lactating, or vulnerable women during three winters **Outcomes:**

		-Increased knowledge of general nutrition -Increased knowledge of the nutritional benefits of soy -Increased soy consumption -Nutritional status of targeted families is maintained or improved

BARTER

Barter 6,000 Metric Tons of Soybeans	Direct: 62,267 vulnerable beneficiaries	**Outputs:** -500 MT locally processed soy flour for distribution on an annual basis -450 MT of low fat soy flour used as payment annually for processing services able to be sold commercially by protein processing facility to help cover its operational costs **Outcomes:** -Improved quality of distributed food basket -Increased availability of high quality protein source -Funds from sale by protein processing facility of 450 MT of soy flour per year received in barter help cover operational costs of protein processing facility
Total Beneficiaries	**Direct: 248,896** **Indirect: 194,615**	

* Note: Although 5,000 women will receive winter rations each year, the composition of this group of women will change as the women's eligibility status changes. In the second and third years, some new beneficiaries will replace others who are no longer eligible. All of the women who receive winter rations (up to 10,000) will also participate in the cooking seminars and receive soy flour as a result of this participation."

"**(d) Anticipated Use of Sale Proceeds**

Subject to Part II, Item III, Paragraph B, ASA will use proceeds as set forth in the following table and in Attachment C:

Table IV

Activities	Dollar Amount of Proceeds
Renovate or Construct Irrigation Systems and Rehabilitate Farm-to-Market Roadways	$3,735,901
Provide Micro-credit	$934,000
Provide Technical Support and Training	$1,740,885
Provide Marketing Assistance	$450,000
Establish an Oilseed Association	$480,000

Establish a Protein Processing Facility	$2,316,456
Conduct a Consumer Awareness Campaign	$250,000
Conduct Cooking Seminars and Support Bakeries	$1,032,000
Conduct Nutrition Impact Surveys	$140,000
Conduct Feeding Trials	$160,746
Total Proceeds for Activities	**$11,239,988**

If actual proceeds differ from the anticipated amount or ASA uses less than the total amount that is specified in Attachment C under "Grand Total Costs" approved for monetization proceeds, ASA will apply the difference to increase or reduce the amount of proceeds allocated to one or more of the activities listed in the table above and make necessary adjustments to any indirect costs associated with such activity(ies), or ASA will return the unused funds to CCC.

Renovate or Construct Irrigation Systems and Rehabilitate Farm-to-Market Roadways

ASA, directly and through its subrecipient(s), will renovate or construct six irrigation systems that have been identified as part of the Provincial government and United Nations Assistance Mission in Afghanistan's (UNAMA) priority list of projects. This may include the following three types of irrigation systems: i) flood irrigation systems with concrete ditches typically used for rice and grain fields, ii) spray irrigation systems with water-carrying pipes that are typically used on land fed by rain, where legumes are generally the crop grown, and iii) drip irrigation also with water-carrying pipes. ASA will make maximum use of manual labor in carrying out this activity, and all unskilled labor will be hired from the beneficiary communities. To the degree possible, materials will be purchased locally. Where local purchases may create a negative market impact, materials will be imported.

ASA, directly and through its subrecipient(s), will rehabilitate approximately 35 km. of roads that will connect agricultural-producing communities to provincial, regional and national markets. Targeted roads will be graded and graveled with 5m width and an average of 20cm thickness. Rehabilitated roads will have a slope on both sides to drain rain water to redirect water off the roads. Ditches will be dug alongside the road and, where roads intersect water streams, concrete overpasses will be constructed.

Provide Micro-credit

ASA, directly and through its subrecipient(s), will provide small scale loans to 800 families. The loans will primarily support the extension of credit for the purchase of agricultural inputs, the development of local craftsmen (tinsmiths and blacksmiths) to support the agricultural economy, and the development of post-harvest activities to increase the return on locally produced crops and livestock. This could include drying, storing,

processing and transportation facilities. The number of loans that will be available for craftsmen will not exceed 50 loans out of a total of approximately 800 loans.

For loan-repayment and performance accountability, the borrowers will be divided into solidarity groups. The actual size of each loan will vary based on the client's capacity, but the average size per loan is estimated to be about $400. Borrowers that build strong credit and demonstrate success may receive additional loans.

Provide Technical Support and Training

ASA, directly and through its subrecipient(s), will use a cascading train-the-trainers model to provide agricultural training, with a focus on soybean production, to farmers, extension workers, and academics. ASA will draw upon expertise from multiple sources to develop the curriculum for this training, with topics that will include seed selection, soil quality, moisture needs, fertilization, planting and cultivating, harvesting, cleaning, storage, etc. ASA will offer an initial course with additional technical follow-up provided at various time intervals. Each participant will receive a certificate upon completion of the training. In addition to providing hands-on training in Afghanistan, ASA will fund the attendance of a few selected individuals at training courses in the United States that are held on an annual basis, generally for a period of one to two weeks.

Provide Marketing Assistance

ASA, directly and through its subrecipient(s), will provide technical assistance to processing facilities, millers, bakers, and feed producers that are interested in utilizing soy-based ingredients in their products. Depending on the identified needs of each business, ASA will provide technical assistance in the basic processing of soy oil, extruded or expelled soy flour, or soy protein; new product development; packaging and storage (options to extend shelf life and minimize loss during transport); and marketing (increasing awareness of the economic and nutritional benefits of soy). Technical seminars will also be arranged to provide group training to targeted zirandas (local small bakeries).

Establish an Oilseed Association

ASA, directly and through its subrecipient(s), will establish an oilseed association, bringing together multiple stakeholders, including government representatives, producers, processors, wholesalers, traders, and academics. Specific activities will include establishing an executive committee, providing training on association development to the executive committee, facilitating a strategic planning process to create a membership drive, hosting conferences or technical seminars, recommending policies to the Government of Afghanistan, conducting promotions, developing a communications strategy, and creating an association website.

Establish a Protein Processing Facility

ASA, directly and through its subrecipient(s), will commission, procure, and transport a self-contained, protein processing facility. ASA will purchase the facility from SALT, a 501(c)(3) organization that is headquartered in Grinnell, Iowa, and registered in Afghanistan. SALT's core services include processing facility design, fabrication, and set-up; contract farming; food and feed processing; training of processing facility personnel; and soy production. In addition to fabricating processing facilities, SALT establishes and supports sustainable agribusinesses in lesser developed countries, specializing in agribusinesses that utilize soy and other locally grown products for human food and animal feed. ASA will arrange for SALT to manage and monitor the protein processing facility. This facility will process soybeans bartered under this grant over three years, yielding low fat soy flour for a direct distribution activity under this grant. The protein processing facility, operating at full capacity, will employ a miller, business manager, and at least 20 unskilled laborers.

Conduct a Consumer Awareness Campaign

ASA will conduct a broad nutrition education and consumer awareness campaign, focusing on the importance of nutrition, basic nutritional concepts, and the nutritional benefits of soy consumption, including as a feed ingredient. Various methods will be used to reach consumers, including radio spots and skits. ASA will also support competitions that raise awareness about nutrition, which may include sports teams, recipe competitions, school competitions, etc. As part of this intervention, ASA will also develop basic flyers and participate in agricultural fairs.

Conduct Cooking Seminars and Support Bakeries

ASA, directly and through its subrecipient(s), will complement the direct feeding activity under this grant by providing basic training on the utilization of soy flour in the home production of *naan* (a local style bread). ASA will also conduct seminars on basic nutrition, including informational seminars about nutrition for pregnant and lactating woman, breastfeeding, complementary feeding for children aged 6-24 months, nutrition in the lifecycle, and diet diversity. To increase sustainability, ASA will also support the start-up of 20 women-owned bakeries for the production of soy-fortified *naan*. ASA will select the women through an application process, with bakeries going into communities that are receiving direct distributions of soy flour. These bakeries will also receive some of the bartered soy flour to be included in a specially baked *naan* for women and children.

Conduct Nutrition Impact Surveys

ASA will conduct baseline and follow-up surveys to determine the nutritional impact for a geographically representative sample of at least 300 beneficiaries who are participating in one of the direct distributions of soy flour during the winter months. In implementing the surveys, ASA will draft the survey questionnaire and measurement protocol, assist with training data collectors, assist with data collection, analyze the data, and provide a final report. The same tools will be used for both the baseline and follow-up survey, allowing

for comparisons. Basic data that will be collected will include demographic data, objective measures (such as height, weight, mid-upper arm circumference, and presence of edema), and subjective and other indicators of nutritional and health status (such as symptoms of respiratory disease and diarrhea, dietary information, and how the distributed foods are accepted and used in the household).

Conduct Feeding Trials

ASA will conduct at least six feeding trials that demonstrate the benefit of soy in poultry feed. Various formulations will be tried using soybean meal from the processing facility and locally available ingredients. ASA will disseminate the feeding trial results through various means, including through events hosted by the Oilseed Association and through ASA's Consumer Awareness Campaign activity. "

Current Status of Project

USDA is reviewing a request from ASA to modify the grant agreement. The purpose of the modification is to set the implementation plan for the fourth and final year of the project. The modification would include changes needed to ensure increased production from committed farmers, sufficient staffing support strategies, and renewed emphasis on marketing and market development of soy in Afghanistan. USDA and ASA have committed substantial resources in negotiating the modification to ensure that the views and recommended adjustments of headquarter and field representatives of ASA and USDA were included. The negotiations were also extended due to delays in submitting vital documents, updating budgets, and submission of the third-party mid-term evaluation.

ASA has complied with the grant agreement in implementing activities and meeting output-based indicators. ASA has reported favorable results in the number of farmers trained, irrigation and roadway construction, and microcredit loans,

The final outcomes associated with the project are uncertain. USDA believes that the project was successful in improving irrigation and roads, increasing credit availability, and promoting market opportunities for soybean products, especially animal feeds. These positive results may improve prospects for production of other agricultural products in addition to soybeans. To date, positive outcomes for soybean production and the long-term operation of the soy processing plant have not occurred. The modification that USDA and ASA are negotiating is intended to focus on these areas.

Identified Challenges

The project has faced numerous challenges including delays in implementation, changes in key staffing, and uncertain outcomes especially in production and the sustainability of the processing plant. Below are more specifics on the challenges:

Production

- Activities that provided items such as training, seeds, and credit have not resulted in sizeable increases in production.
- Insecurity in the regions where activities occurred has affected production results.
- Farmers remain reluctant to switch to soybean production despite the efforts by the Government of Afghanistan, Nutrition and Education and International, and ASA. Several entities are continuing to conduct experiments with seed varieties in regions to increase the yield and profitability of soybean production.
- The low level of production increases risks for the sustainability of the processing plant and may lead to reliance on imported products to remain viable.

Management

- ASA and its subrecipients had difficulties with staffing in Afghanistan. Turnover was high, and some employees did not have sufficient experience.
- Philosophical differences between ASA and Nutrition and Education International (another group investing in the soy value chain) prevented the coordination of resources and had a negative impact on the investments in soybeans.
- Coordination and communication with the Government of Afghanistan was weak.
- While individual activities were beneficial, the overall project design had gaps that may have been avoided if analyses on feasibility and the value chain were completed at the beginning of the project.

Plan for Mitigation of Challenges

Headquarter and field representatives of ASA and USDA have discussed the challenges facing the program and have negotiated a modification to the agreement. The modification incorporates lessons learned from the implementation of the program and the mid-term evaluation. The modification redirects resources to focus on production, improved management, and increasing the likelihood of the sustainability of the processing plant. A key objective is to engage with larger scale farmers in the Balkh region that use irrigated land to increase production of soybeans.

The mid-term evaluation notes that a sustainable, local-production-based soy value chain in Afghanistan is not achievable by the end of 2014. The independent evaluator provides key recommendations that an extension through the end of 2014 could provide a proof-of-concept demonstration in Balkh. If 2014 production figures from large farms are sufficiently high (yield and profit relative to competing crops), an argument could perhaps be made that a profitable soy industry is possible.

Within the modification request, ASA expects production to reach 1,200 MT of soybeans, with 90 percent of that being sold to the factory. Further, ASA will shift resources to meet the minimum number of trainings, involve the district-level agents of MAIL, and will work with cooperatives in the Balkh province. While the projected level of locally produced soybeans will fall well below the break-even point of the factory (2,000 MT), the private

investors in the plant have added processing equipment to produce refined oil. The increased investment by the owners indicates optimism for the longer-term viability of the plant.

USDA is monitoring the activities closely and has increased the frequency of performance and financial reports from a semiannual basis to a quarterly basis.

ATTACHMENTS:
Financial Report
Midterm Evaluation Report
Agreement and Amendments


EnCompass LLC
American Soybean Association/World Initiative for Soy in Human Health
Soybeans for Agricultural Renewal in Afghanistan Initiative
Midterm Evaluation: Final Report
February 5, 2014
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Acronyms

ACE	Agricultural Credit Enhancement
ASA/WISHH	American Soybean Association/World Initiative for Soy in Human Health
ASF	Afghan Soy Factory
ASMED	Afghanistan Small and Medium Enterprise Development
CBCMP	Capacity Building and Change Management Program
CBI	CBI Global, Cooperative Business International
DAIL	Directorate of Agriculture, Irrigation, and Livestock
FAS	USDA/FAS Foreign Agriculture Service
JDA	Joint Development Associates
Jerib	0.4942 acres
MAIL	Ministry of Agriculture, Irrigation, and Livestock
NEI	Nutrition and Education International
OCGAA	Oil Crop Growers Association of Afghanistan
PARSA	Physiotherapy and Rehabilitation Services for Afghanistan
SALT	SALT International
SARAI	Soybeans for Agriculture Renewal in Afghanistan Initiative
SFL	Shelter for Life
MT	Metric Ton, 2200 lbs.
USDA/FAS	US Department of Agriculture/Foreign Agriculture Service
VEGA	Volunteers for Economic Growth Alliance

Evaluation Team Members

Allison Brown	Team Leader
Jonathan Jones	Senior Evaluation Specialist
Khaista Yousafzai	Senior Agriculture Advisor

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Executive Summary

In September 2010, the American Soybean Association/World Initiative for Soy in Human Health (ASA/WISHH) received funding from the United States Department of Agriculture Foreign Agriculture Service (USDA/FAS) for a three-year project funded by the provision of commodities through the Food for Progress program. The Soybeans for Agricultural Renewal in Afghanistan Initiative (SARAI) project was funded through monetization of donated refined soybean oil. In addition, USDA/FAS donated defatted soy flour and soybeans for direct distribution and barter.

SARAI seeks to address immediate humanitarian needs and to establish livelihood opportunities through the promotion of a soy value chain in Afghanistan. The project is being implemented in cooperation with a partnership of international and local organizations and includes the following activities:

- Road and irrigation systems rehabilitation
- Microcredit loans—production, entrepreneurship, and general use
- Soybean production technical support and training
- Marketing assistance
- Establishment of an oilseed association
- Establishment of a protein processing facility
- Consumer awareness campaign to increase knowledge of general nutrition and the health benefits of soy
- Cooking seminars and support to bakeries
- Nutrition impact surveys
- Livestock feeding trials
- Direct distribution of soy flour

Under the Master Agreement between ASA/WISHH and USDA/FAS, ASA/WISHH is required to undertake mid-term and final project evaluations. ASA/WISHH was unable to commission this evaluation at the midpoint of the project. Technically the project ended September 30 2013, but it has been extended to December 2013. Another evaluation is proposed for late 2014 on the assumption that USDA/FAS will approve a proposed no-cost extension through the end of 2014. This evaluation seeks to provide a useful snapshot of project progress towards reaching objectives and outcomes and to estimate whether the project will reach its goals in the time remaining.

METHODOLOGY

The design and methodology were developed following consultation with and approval by ASA/WISHH and USDA/FAS. Due to time and budget limits, the evaluation design, as agreed with ASA/WISHH and USAID/FAS did not included all project activities mentioned in the original Statement of Work, and some project activities were given lower priority. This mid-term evaluation does not include an audit, which USDA/FAS intends to do in 2014. Time and resource constraints also limited the ability to reach some sources of information.

A team of three evaluators undertook fieldwork, one in the U.S. and two in Afghanistan. Data collection in the U.S. focused on in-person and telephone interviews with key actors, and review of background documents to understand project history, working relationships among partners, and M&E activities. The field team conducted data collection in Afghanistan over 17 days (26 October-11 November) in Takhar, Kunduz, Mazar, and Kabul, visiting project sites, production sites, reconstruction sites, and

markets, and interviewing management and staff of the partner agencies and others, government officers, farmers, and staff of non-government agencies. The field team looked most closely at implementation issues and measures of success.

Report Review and Feedback: The evaluation team provided ASA/WISHH with a draft evaluation report for review. Feedback on factual inconsistencies was addressed in the final report. Differences in perspectives that were not reconcilable are noted in footnotes throughout the report.

FINDINGS

It is important to note at the outset that the evaluation data revealed a number of significant challenges the project faced in undertaking development work in a conflict zone. The challenges noted contributed to the need for the project to adapt and react to the fluid situation on the ground and directly affected project results.

Production

1. Soy production has been significantly short of SARAI project goals. This is a critical finding that impacts all other elements of the value chain. The project's M&E data substantiates that farmers have not adopted soybeans. According to information supplied to the evaluation team by Shelter for Life (SFL), on November 21, 2013, project farmers have provided 161.4 metric tons (MT) of soybeans during the 2013 harvest to the Afghan Soy Factory (ASF). The factory needs 4,500–5,000 MT to operate at full capacity using locally sourced raw materials. Historical data show that farmers who have participated in SARAI soy production training have not planted soy in the absence of input packages. Some farmers who accept the input packages are reported to eat the seed and use the fertilizer for other crops. Farmers who do plant soy have experienced poor results in terms of high production costs and low yields.

2. Production data from SARAI and other reliable sources do not demonstrate that locally produced soy can be more profitable than alternative crops, or that soy can be locally sourced at contract prices that are cheaper than importation.

3. Independent scientific research and analysis by other agencies indicate farmers are unlikely to accept soy into their cropping system for many reasons, including excessive labor requirements over other crops, the inability of soy to produce a good yield in the soil, and weather conditions prevalent in northern Afghanistan where the project is operating.

4. Without the prospect of adequate soy production, many stakeholders interviewed for this evaluation worry that there are a lack of incentives for the local project partner to maintain the Afghan Soy Factory or to promote soy production after the close of the project. In the absence of adequate yields and a stable market price, no data exist upon which to calculate the profitability of the Afghan Soy Factory.

5. The production and processing activities of the value chain occurred in different provinces in a region of increasing insecurity. This location disruption added management and logistical burdens to the project that could have been avoided by co-locating production and processing. In addition, a second soy-processing factory has opened in Kunduz, between Takhar and Mazar that will likely undercut Afghan Soy Factory's prices for Takhar products because transport costs are less.

Other Implementation Tasks

6. Road and irrigation system rehabilitation has been useful to beneficiaries and have been successful components of the project when viewed as standalone interventions. However, this work has not contributed to advancing the soy value chain, in part because of the distance between the production sites and the Afghan Soy Factory.

7. The microcredit activity did not further the soy value chain. A response given by our admittedly small sample of farmers (4 of 6 farmers interviewed) is that they considered the microcredit component to be compensation for their financial losses related to soybean production. Farmers commonly used the loans for activities outside of soy production, such as investing in sheep. It is important to note that, per the Master Agreement, the microcredit component did not need to be exclusively tied to soy production.

8. The Afghan Soy Factory is operational, largely due to the knowledge and experience of Sustainable Alternative Local Technologies (SALT), which was able to overcome numerous obstacles to get the factory running with minimal delays. However, the lack of locally produced soybeans puts the sustainability of the factory in question. To function at full capacity, the factory needs 330–430 MT per month (4500 MT per year) for soy meal. If the factory were producing soy flour, it would need 420 MT per month (5,000 MT per year). According to information supplied by SFL dated November 21, 2013, project farmers provided 161.4 MT of soybeans to the factory in 2013. The current intention is to turn the factory over to the Afghan business partners at the end of project implementation. Given a lack of in-country production, there is widespread speculation that inputs for processing will be imported or that the factory will be broken up and equipment will be sold after project completion.

9. Despite being a task required by the Master Agreement, distributing soy flour without an existing market supply did not further the goal of a sustainable soybean value chain. The distribution diverted ASA management resources from other time-sensitive activities, including project set-up, the initial oil auction, renegotiating subcontracts, and sourcing and importing seed for the first planting season – tasks that were pressing for attention. A nutrition survey showed that beneficiaries had positive health outcomes in terms of nutrition maintenance, although the report acknowledged the methodological challenges in attributing health outcomes with the soy distribution.

Marketing soy products

10. Based on interviews with a wide range of stakeholders, it appears that developing a market for soy meal and soy flour seems to present no important challenges. There is widespread belief among stakeholders including the Afghan government that it is important to develop an indigenous soy industry for animal feed. This is supported by national import figures. Afghanistan imports thousands of tons of poultry feed alone and the availability of locally produced ingredients and mixed feed would save foreign exchange. The technical advantages of soy-wheat flour blends make it advantageous to bakers and consumers, thus supporting favorable market conditions. Bread bakers, pasta manufacturers, and confectioners expressed willingness to add soy flour to their product.

11. The pilot activity of Physiotherapy and Rehabilitation Services for Afghanistan (PARSA) with women-owned community bakeries has not provided sufficient data to show empirical success. However, the bakeries do appear to be thriving and well accepted by the entrepreneurs. Based on observation and discussions with stakeholders, these bakeries seem to be a promising activity that could easily be replicated and that can be scaled at a pace paralleling the availability of soy flour.

Management

12. SARAI has struggled with staffing capacity in-country. The project has had three country directors in three years and SFL has had five expatriate agronomists in the same period. There is a sense among stakeholders that leadership in-country did not have the requisite experience in agriculture or rural development to oversee the project. Short-term technical assistance has not been well managed and the consultants deployed, many of whom have been chosen from within ASA and affiliates, have been of uneven quality. Within SFL, the staffing gaps seem to have undermined implementation. In general, the number and technical background of the field staff was appropriate at the level of technical and support staff, but SFL leadership in Taloqan seemed to have been focused on infrastructure (road and irrigation construction) rather than on agriculture. This was likely due to the education background of staff and the organization's historical focus on construction. Soybean production, the most important SARAI component, and its attendant microfinance for production, seem to have received inadequate attention.

13. This evaluation team did not assess the capacity of Nutrition and Education International (NEI) to produce soy, but the loss of NEI as the production partner in the first few months of implementation (immediately before the first planting season) has had a negative impact on the possibilities of success for soy introduction.

14. Interview and observation data indicate that SARAI project goals—particularly related to the soy value chain—have been undermined by SFL's inadequate management of farmer training, agriculture extension, microcredit, and road and irrigation rehabilitation. SFL's lack of appropriate skills and unwillingness to modify its own agenda and operating processes during SARAI implementation has contributed to the project's challenges.

15. The mid-term evaluation was delayed, which resulted in a lost an opportunity for learning. The technical midpoint of the project was April 2012.

16. The project has not taken steps to support amendments of regulations on commercially produced bread (commercial bakeries are licensed and regulated, community bakeries are not) needed to exploit the commercial bread market when soy flour becomes available.

17. Based on observation and interviews with SARAI staff and government staff, communication among SARAI partners and between SARAI and the Afghan government has been poorly managed. Self-identification of some partners with the SARAI project is minimal.

Project Design

18. Interviews revealed that ASA and team members did not conduct operational feasibility, gross margin analysis, or value chain studies as part of the project design process. Independent

scientific research and analysis by other agencies show that soy is unlikely to be accepted by farmers for many reasons including excessive labor requirements over other crops and the difficulty of realizing good yields in the soil and weather conditions prevalent in northern Afghanistan. There are doubts among those knowledgeable about agriculture in Afghanistan about whether sustainable soy production will be possible in Afghanistan, regardless of the project's structure or implementation methodology, because growing conditions are not deemed suitable.

A logframe and program theory was not generated during project design, although portions of the Master Agreement function as a kind of logframe. Without a value chain analysis, feasibility study or logframe/program theory, a comprehensive project approach was not developed to show the theory and logic behind the various interventions, how they are interdependent, and how they, together, contribute to intermediate results and longer-term outcomes.

19. Some SARAI partners feel that sustainability was not integrated into the original project design and that the discussion of sustainability has just arisen. However, a review of design documentation and other records shows that sustainability was indeed a key aspect of the initiative. It is important to note that because the project has not internalized program theory, stakeholders have quite different interpretations as to what project sustainability means. One key gap in terms of project sustainability has been a lack of focus on sourcing viable seed inputs.

20. According to project documents, farmers were to be provided with inputs, including soybean seed and inoculum, during their first year of production. The partner agreement between ASA and SFL (dated March 12, 2011) indicates that SFL was responsible for sourcing locally available soybean seeds for inputs after the first production year. The evaluation team was unable to document efforts by the project to source locally available soy seed. Rana Group indicates that it is planting soybean for seed production but we do not have an indication of the amount they are aiming for or their success or the price at which the seed will be offered.

CONCLUSIONS

Conclusions are presented to correspond with the evaluation questions.

To what extent does SARAI design align with the problems and goals outlined in the Master Agreement?

- While the project has had some stand-alone successes, overall the SARAI design does not align with the problems and goals outlined in the Master Agreement with respect to the creation of a sustainable value chain for soybeans. The project was hampered by not being based on a program theory and therefore the overall design has significant flaws. The partnership arrangements did not support a coordinated effort among the partners. The timing of the loss of NEI as a partner crippled implementation.

To what extent have SARAI interventions been effectively implemented?

- SARAI has completed and is operating the soy processing factory.
- SARAI has effectively monetized donated soy products with the exception of the first year when outside issues interfered.
- SARAI has undertaken irrigation, road rehabilitation, and microcredit activities. However, these

activities have not been effectively integrated into the soy value chain.
- SARAI has not introduced profitable soy production.
- SARAI has not deployed staff effectively.
- SARAI has not developed an effective M&E system to monitor and control project implementation.

To what extent have the project interventions been effective in meeting stated objectives and contributing to expected impacts?

- The production challenges besetting SARAI are such that the initiative will not be able to achieve its goal of developing a sustainable, local-production-based soy value chain in Afghanistan within the time allotted. Even with a no-cost extension, the value chain is too complex and underdeveloped to allow the project to achieve its goal.
- The project runs the risk of promoting demand for soy products in the absence of supply. Excessive demand can swamp businesses, especially young businesses. The local partners will begin to run the factory based on imported materials, thus perhaps undermining local production. If demand is not met, consumers will lose interest and substitute other products.

What can be expected to be the long-term results of the ASA/WISHH intervention?

- It is difficult to estimate the long-term impacts of some of the stand-alone project successes. However, given the inability to develop soy production, and independent research that indicates that soy is unlikely to be accepted by farmers into their cropping system, we conclude that it is unlikely that the ASA/WISHH intervention will result in a sustainable soy value chain.

What are the lessons learned from SARAI that might help ASA/WISHH be more successful in similar interventions in the future?

- A number of lessons have emerged as a result of the SARAI initiative that might help ASA/WISHH be more successful in similar interventions in the future:
  - Conduct a feasibility study prior to project design
  - Develop a program theory and logframe to show the theory and logic behind an intervention
  - Develop a comprehensive and meaningful monitoring and evaluation system that is informed by a program theory and logframe. Establish a system to use monitoring data to inform decisions throughout the project lifecycle
  - Put a communication strategy in place to ensure project staff and key partners are all working together to support the intervention
  - Ensure that the skills of project staff and partners align with project needs

What influences from other actors in the soy value chain have enabled or constrained program implementation and results?

- The volatile security situation resulted in a fluid and unpredictable project environment, which has compounded implementation difficulties.

KEY RECOMMENDATIONS

1. The proposed one year, no-cost extension should be approved on the condition that remaining project resources are directed to providing a proof-of-concept demonstration in Balkh. This demonstration should be on large mechanized farms and on small farms among SARAI's previously recruited and trained cohort of farmers. This demonstration should include significant investment in staff, outreach, and training, and publicity from the local partner. If 2014 production figures from small and large farms are sufficiently high (yield and profit relative to competing crops), an argument could perhaps be made that a profitable soy industry is possible.

2. The project should undertake team-building exercises with project partners to develop a program theory, logframe, a 2014 work plan, and a comprehensive M&E plan to reconstruct project history and to monitor the fourth year of the project.

3. Despite the concentration of efforts in Balkh, some obligations in other locations may remain. SFL should be given SARAI resources in Takhar and Kunduz sufficient only to fulfill contractual obligations already in place, and these obligations should be fulfilled using SFL permanent staff, with SARAI budget support as needed. SFL's SARAI staff and activities should be moved to Balkh entirely to participate in the proof of concept demonstration.

4. When developing its staffing plan for 2014, ASA/WISHH should consider eliminating the positions of Country Director and Production Director, especially if SFL continues to be the agronomic lead. An in-country Team Leader, with an appropriate in-country support team, should be sufficient to handle the remaining project activities and closeout.

5. To facilitate communication within the project and to support the intensive effort in Balkh, the project office should be moved to Mazar and SARAI partner agencies should share office space. The project should develop a robust internal communication system to ensure regular communication among key partners throughout the rest of the project. The project should initiate regular and frequent interaction with relevant government offices.

6. Given the volatility in staffing of the agronomist position to date, the project should consider employing Afghan nationals with soy experience to handle outreach. This staffing could perhaps be managed on a cooperative or loan basis, although a more sustainable option would be for the local partner to recruit and hire their permanent agronomists at this time.

7. For publicity purposes and to facilitate nutrition education while not increasing the demand for soy flour beyond availability, the women's bakery pilot project should be expanded, particularly in Mazar, within the project and support offered to other agencies for expansion of the activity.

8. To gain a wider perspective on agriculture production in Afghanistan, future short-term technical assistance should be recruited from outside ASA/WISHH and its affiliates in order to provide situation-relevant knowledge and skills.

1 Background and Context for the Evaluation

In September 2010, the American Soybean Association/World Initiative for Soy in Human Health (ASA/WISHH) received funding from the United States Department of Agriculture Foreign Agriculture Service (USDA/FAS) for a three-year project, *Soybeans for Agricultural Renewal in Afghanistan Initiative* (SARAI). The project is funded through the USDA/FAS Feed the Future program. SARAI seeks to address immediate humanitarian needs and to establish livelihood opportunities through the promotion of a soy value chain in Afghanistan. The project is being implemented with the support of international and local partners.

As part of the Master Agreement between ASA/WISHH and USDA/FAS, ASA/WISHH is required to undertake mid-term and final project evaluations. ASA/WISHH was unable to commission this evaluation at the technical midpoint of the project in early 2012 for implementation May–June, around planting time.[1] Instead, ASA/WISHH conducted the mid-term evaluation near the end of the third and final year of the project. Technically the project ended September 30, 2013, but it has been extended to December 2013.

EnCompass LLC was contracted in November 2013 to conduct an evaluation of project progress to date, and offer recommendations to improve the project should it be extended for a fourth year. A final evaluation is proposed at the end of the project on the assumption that USDA/FAS will approve the proposed no-cost extension through the end of 2014.

The ASA/WISHH Statement of Work **(Appendix 1)** and the mid-term evaluation work plan and evaluation questions matrix **(Appendix 2 and 3)** that were approved by USDA/FAS provide a detailed overview of the mid-term evaluation effort goals and methodologies.

1.1 Project Overview

SARAI is funded through the monetization of donated refined soybean oil. In addition, USDA/FAS donated defatted soy flour and whole soybeans for direct distribution and barter. The estimated value of SARAI is $28 million[2], which includes both commodity costs and transportation costs from the United States. SARAI's goal is to create a sustainable oilseed value chain. To accomplish this, SARAI is focused on the following activities:

- Road and irrigation systems rehabilitation
- Microcredit loans—production, entrepreneurship, and general use

[1] During the course of the evaluation, ASA noted the struggle they had to procure evaluation services. ASA provided the following context: The solicitation went through 2 reviews by USDA in the late summer/ early fall of 2012. The first release of the solicitation resulted in no one bidding. A second release resulted in no bidder, though one group expressed interest. ASA worked to contract with them, but the group ran into challenges in getting appropriate consultants in the time needed. That group referred ASA to EnCompass. In summary, according to ASA, it took months to locate a group prepared to conduct interviews in Afghanistan on a short turnaround. The budget also went from $40,000 to $50,000 to $115,000. These factors also contributed to a delayed mid-term. The solicitation went out to about 1200 people the first round, and to the same group the second round, plus an additional 35-40 firms.

[2] Figure given to the evaluation team via email communication with ASA, and includes money used for transportation of commodities from the U.S. to Afghanistan.

- Soybean production technical support and training
- Marketing assistance
- Establishment of an oilseed association
- Establishment of a protein processing facility
- Consumer awareness campaign to increase knowledge of general nutrition and the health benefits of soy
- Cooking seminars and support to bakeries
- Nutrition impact surveys
- Livestock feeding trials
- Direct distribution of soy flour

The tasks are divided among the partners as follows:

- **ASA/WISHH** (*www.soygrowers.com, www.wishh.org)* is a humanitarian initiative of the American Soybean Association, an important trade association of the U.S. soy industry. ASA, acting through WISHH, undertook project oversight and management. WISHH, acting through commercial agents Cooperative Business International (CBI) and AU Logistics, imported and stored donated soy products and managed the commodity auction to finance the project. In addition, WISHH was responsible for soybean promotion, developing an oilseeds association, nutrition impact surveys, livestock feeding trials, and for providing cooking seminars and support to bakeries.
- **Shelter For Life (SFL)** (*www.shelter.org*) undertook road and irrigation improvements, agriculture training, agriculture extension and microcredit.
- **SALT International** (SALT) (*www.saltinternational.org*) undertook the construction and management of the Afghan Soybean Factory (ASF) and the training of factory managers and staff.
- **Naseeb Group** (*www.naseebgroup.com*)is the local partner in the SARAI project. Naseeb Group provided the land, building, staff, and a portion of the operating capital for the Afghan Soy Factory. ASA/WISHH proposes to convey the factory equipment to Naseeb Group at the end of project.
- **Physiotherapy and Rehabilitation Services for Afghanistan (PARSA)** (*www.afghanistan-parsa.org*) undertook the distribution of soy flour to pregnant and lactating women. PARSA also piloted a soy-wheat flour-baking project with 20 woman-owned bakeries. In 2013, PARSA also assisted SFL and Naseeb Group to collect the soy harvest in Takhar.

Nutrition and Education International (NEI) (*www.neifoundation.org*), was an original project partner along with SFL. NEI withdrew from the project several months after the signing of the Master Agreement. This issue is discussed further in the project history below.

Other participants and contractors in the project have included:

- **Cetena Group** (*www.cetena.com*) is an advertising firm contracted to conduct the soy promotion activity.
- **The Cutting Edge:** conducted the nutrition study after the soy-flour distribution, (led by a dietician).
- **Oil Crop Growers Association of Afghanistan (OCGAA)** (*www.ocgaa.com*) is the Oil Crop

Growers Association of Afghanistan. The project supports the association's promoting soy as one of many oilseed crops.

- **Cooperative Business International-Global (CBI)** (*www.cbi-global.com*) is the agent who managed the monetization of the donated soybeans.
- **AU Logistics (*www.aulogistics.com/afghan.htm*)** handled the storage of donated soybeans in Afghanistan.

Project History:

ASA leadership had conversations with NEI about growing soybeans in Afghanistan, leading to an interest in a project focused on a soybean production using the WISHH mechanism that has been funded by USDA since 2000. According to ASA staff, SFL approached ASA to partner on the project with ASA being the prime. This partnership seemed beneficial as SFL already had existing USG funded activities in Afghanistan. ASA, following discussions with USDA, decided to pursue the opportunity and focus on the entire soy value chain. To fund the project, ASA signed a sub-partner agreement with CBI in April 2010 to oversee the monetization of refined soy oil sourced from USDA Food for Progress Program. The Master Agreement was signed with USDA in September 2010 with a project end date of September 30, 2013.

Monetization: Delays in transshipping the donated supplies at the Pakistan border in late 2011 caused setbacks for project monetization, resulting in some soybean oil being off-loaded and sold in Dubai at a lower price than expected. Auctions occurred on the following dates: December 28, 2010, October 1, 2011, August 26, 2012, and November 13, 2012. According to interviews with CBI and ASA, the monetization process resulted in higher funds than expected for the project

Production: Per the original project design, NEI was to handle production, and SFL was tasked with the infrastructure aspect of the project (irrigation and road rehabilitation). However, NEI withdrew from the project due to disagreements about the scope of the agreement and project implementation policies. NEI was to have overseen the soy production, cooking seminars, and direct distribution components for the project. After NEI's departure, ASA was without a partner for production approximately two months prior to the first planting season. The agriculture duties (agriculture extension and microcredit) were taken up by SFL. ASA amended the sub-partner agreement with SFL in March 2011 to incorporate soy production into SFL's existing tasks under the project. One implication of this arrangement was that soybean production would occur in Takhar, due in part to SFL's prior experience doing development work in the province. The first planting occurred in June 2011 and the first harvest October 2011.

Afghan Soy Factory: ASA signed a sub-partner agreement with SALT on November 15, 2010, to oversee construction and operation of the soy factory. The original intention was for the soy factory to be located in an industrial park in Kabul, however a land dispute with farmers and along with violent protests, compelled SALT to look for a new location. A USG staff member suggested that the factory be located in Mazar. The factory was completed in June 2011. The Naseeb Group provided the land and building for the factory.

Cooking Seminars and Distribution: As noted above, NEI was originally intended to handle distribution and cooking seminars. Once NEI withdrew from the project, PARSA was brought into the partnership to manage soy-flour distribution and cooking seminars. In July 2011, ASA signed a sub-partner agreement with PARSA to: a) provide home cooking seminars and soy flour to pregnant/lactating and vulnerable

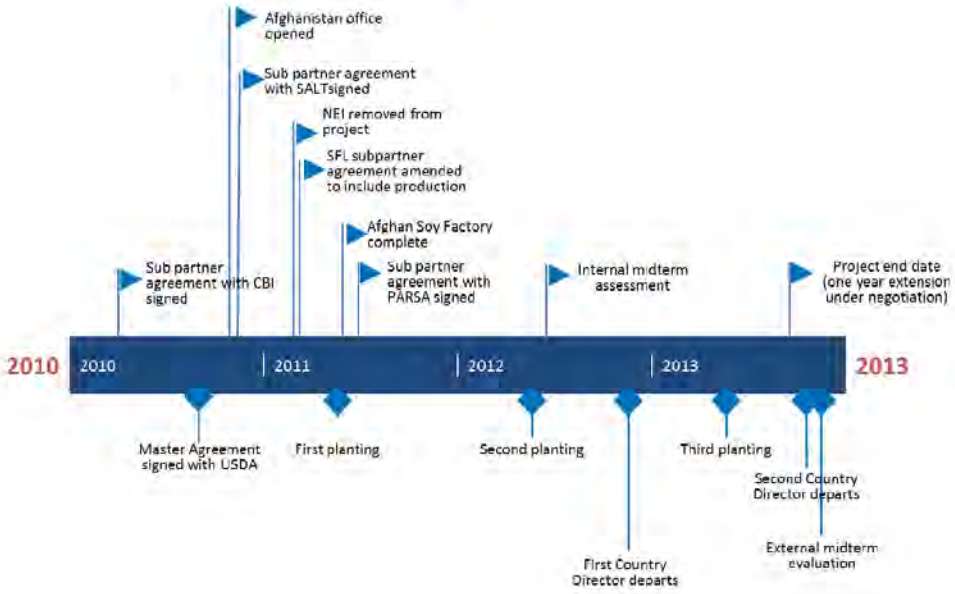
women; b) provide a winter ration to pregnant and lactating women per annum over three years; and c) carry out a nutrition survey.

Staffing: The first ASA in-country team leader was hired December 4 2010, and departed on November 15 2012. A new team leader, who alternated his time between the USA and Afghanistan, took over on February 1, 2013, and left his post on October 15 2013. A consultant, with the position title Team Leader, arrived in late October 2013 during data collection for this evaluation. The previous Deputy Country Director, an Afghan national, has been appointed as the ASA Country Director.

As of this writing, ASA is currently negotiating an amendment with USDA for a no-cost extension of the project of one year, to December 2014. No extension past that date is being considered.

A timeline for the project is presented in **Exhibit 1.**

Exhibit 1: Project Timeline with Key Events Highlighted



2 Evaluation Design and Methodology

The evaluation design and methodology were developed following consultation with and approval by ASA/WISHH and USDA/FAS. Due to time and budget limits, the evaluation design, as agreed with ASA/WISHH and USAID/FAS, did not include all project activities mentioned in the original Statement of Work, and some project activities were given lower priority. This mid-term evaluation does not include an audit, which USDA/FAS intends to do in 2014. Time and resource constraints also limited the ability to reach some key sources of information.

2.1 Evaluation Questions

The questions that frame the evaluation are outlined in **Exhibit 2** below.

Exhibit 2: Evaluation Questions

Theme	Evaluation Questions
Project design/Approach	1. To what extent does SARAI design align with the problems and goals outlined in the Master Agreement?
Project implementation	2. To what extent have SARAI interventions been effectively implemented? a. To what extent do ASA/WISHH and partners have the right staffing patterns, management structures, and communication strategies in place? b. To what extent are ASA/WISHH and partners conducting monitoring and evaluation, in line with contract requirements, and in context of overall successes of meeting the objectives of creating a sustainable Afghanistan soybean value chain? c. What lessons have been learned that might improve project implementation in the future, with a primary focus on creating a sustainable Afghanistan soybean value chain?
Contribution	3. To what extent have the project interventions been effective in meeting stated objectives and contributing to expected impacts?
Sustainability of production and local processing efforts	4. What can be expected to be the long-term results of the ASA/WISHH intervention? a. What does sustainability look like for key stakeholders? b. To what extent do perceptions of sustainability align between key stakeholders? (ASA/WISHH, USDA/FAS, Headquarters, field, partners, beneficiaries) c. What are the pathways to sustainability? d. What has been learned thus far to capitalize on opportunities for improving sustainability?
Replicability	5. What are the lessons learned from SARAI that might help ASA/WISHH be more successful in similar interventions in the future?
System and context of the SARAI project	6. What influences from other actors in the soy value chain have enabled or constrained program implementation/results? a. What is influencing beneficiary, (with a focus on crop rotation) decisions on the ground?

A full evaluation questions matrix (which includes sub-questions, illustrative measures of success, and data collection strategy) is available in **Appendix 3**.

2.2 Methodology

This section summarizes the methodological approach undertaken to respond to the evaluation questions. A fuller description of the methodology can be found in **Appendix 4**. The evaluation team collected primary qualitative data using a variety of methods: document review, semi-structured interviews, site visits, and walkthroughs. Data collection tools were developed prior to fieldwork. **Appendix 5** contains a sample data collection protocol used in this evaluation.

A team of three evaluators undertook fieldwork, one in the United States, and two in Afghanistan. Data collection in the United States focused on in-person and telephone interviews with key actors, and review of background documents to understand project history, working relationships among partners, and monitoring and evaluation (M&E) issues. The field team conducted data collection in Afghanistan over 17 days (October 26 to November 11, 2013) in Takhar, Kunduz, Mazar, and Kabul. The team visited project sites, production sites, reconstruction sites, and markets, and interviewed management and staff of the partner agencies and others, government officers, farmers, and staff of non-government agencies. The field team looked most closely at implementation issues and measures of success.

Interviews: The evaluation team conducted individual and group interviews in various formal and informal settings including over the telephone, village discussions, market visits, and breakfast and dinner meetings. A full list of data collection participants is available in **Appendix 4**.

Walkthroughs: Walkthroughs were undertaken in villages in Balkh and Kunduz provinces, factories in Mazar and Kunduz cities, Warehouse 2 soy storage facility in Mazar city, a poultry farm, and markets in various locations.

Document Review: The evaluation team worked with ASA/WISHH and partners to obtain and review the most appropriate set of documents from all relevant sources. Documents that were reviewed are listed in **Appendix 4**.

An explanation of how the qualitative data is presented in this report can also be found in **Appendix 4**.

2.3 Exclusions and Limitations

The ASA/WISHH Scope of Work (**Appendix 1**) and the Evaluation Design approved by ASA/WISHH and USDA/FAS (**Appendix 2 and 3**) detail the key activities of this evaluation. A key aspect of the participatory evaluation design process was to prioritize the evaluation areas of focus. Because of this process, the following areas were deemed lower priority, and hence not focused on in the evaluation:

- Review of monetization procedures was excluded entirely
- Road construction and irrigation work was downgraded in importance
- Financial review was excluded entirely
- Commodity storage was downgraded in importance

The evaluation team attempted, but was unable to schedule interviews with the following stakeholders:

- The first ASA/WISHH Country Director
- Previous SARAI agronomists who had worked for SFL
- Former Senior Analyst, Office of Capacity Building and Development, USDA/FAS (involved in the

project at inception)

Time, security, and resource constraints precluded the following visits that could have been useful for the evaluation:

In all regions:
Interviews with large numbers of farmer participants and with non-participant controls were not possible because of the small budget allotted to fieldwork.

In Mazar:

- *Sanizada Co:* An example of a commercial oil press
- *Dairy farm:* Dairy farms are not ordering soy meal but chicken farms are. Feed trials were conducted at dairy farms. Feed trials were conducted at poultry farms and a poultry farm was visited during data collection.

In Kabul

- *Cetana:* Contracted to do marketing and messaging for soy food and soy feed.
- *ACE project:* USAID supported oilseed investments
- *ASMED USAID:* supported oilseed investments. Also did soy assessment

3 FINDINGS

3.1 The Challenges of Development work in Afghanistan

It is important to note at the outset that the evaluation data revealed a number of significant challenges the project faced in undertaking development work in a conflict zone. The challenges noted contributed to the need for the project to adapt and react to the fluid situation on the ground and directly affected project results. Some of the challenges the project faced were:

- Security challenges that often prevented SFL from entering into production areas
- Constant security threats that resulted in an ongoing high pressure/stress work environment, e.g., SFL staff faced three abduction threats, and were at times met with gun-wielding farmers when they went to check on whether farmers utilized input bundles
- Security issues at the industrial park in Kabul where the factory was to be originally constructed resulted in the need to find a new location
- Gender disparities meant that it was difficult for women to attend training and pick up input bundles
- Government resistance to the introduction of soy seeds with a quicker maturity

3.2 Production

1. Soy production has been significantly short of SARAI project goals. This is a critical finding that impacts all other elements of the value chain. [3] The project's M&E data substantiates that farmers

[3] In response to this finding, ASA noted the following: It takes at least 5-7 years to successfully introduce a new crop. This is especially true with illiterate, small, subsistence farmers that have been targeted in Afghanistan. In the absence of knowledge of soybean production by the SARAI farmers, they and the SFL agronomists (who also did have experience with soybean production) resorted to planting the soybean crop in the same manner as they planted cotton on the raised ridges. Targeted farmers knew this method and it was successful for cotton – why not soybeans?

SARAI has had only two full production seasons, 2012 and 2013. Only approximately 900 farmers were able to plant in 2011 because of the seed situation as outlined further below. Moreover, early snows came the last week in September in 2011 causing substantial crop loss. The Stine 3300 is a 120-130 day crop and the season in Takhar is just too short, and especially if winter weather comes early. This was a bad experience for first time farmers with a brand new crop that was being introduced. This situation contributed to the fact that more of the 2011 farmers did not plant in 2012 – they had just seen their neighbors lose their crop to early snows; why would they plant the same crop in 2012? There is no crop insurance in Afghanistan to mitigate crop risk so when farmers lose the income from a crop, it is a very serious situation. This planting method resulted in a low plant population density which in turn leads to fewer pods, fewer beans and low yields. Low yields continue to be a problem because of issues with plant population density and this is one of the issues to be addressed in the 2014 planting season. In 2014 ASA's aim is to develop a means of mechanical planting that would increase plant populations, which is critical to acceptable yields

SARAI agronomists have been working in the field to identify and promote the most effective methods for soybean cultivation but this takes time – lots of time. In 2013 ASA had field trials that used raised beds, broad cast planting, and row planting. The results of these plots are still being determined so that in 2014 the most effective planting method can be used. In addition, even though field trials may demonstrate higher yields for a planting method, there is no guarantee in the field that the farmers will adopt this method. Adoption of new farming practices comes when farmers can see the success in the fields for themselves.

have not adopted soybeans. According to information supplied to the evaluation team by Shelter for Life (SFL), on November 21, 2013, project farmers have provided 161.4 metric tons (MT) of soybeans during the 2013 harvest to the Afghan Soy Factory (ASF). The factory needs 4,500–5,000 MT to operate at full capacity using locally sourced raw materials.[4] Historical data show that farmers who have participated in SARAI soy production training have not planted soy in the absence of input packages. Some farmers who accept the input packages are reported to eat the seed and use the fertilizer for other crops. Farmers who do plant soy have experienced poor results in terms of high cost of production and low yields.

Since the inception of the project, SFL has provided training to 13,000 farmers and input packages to 10,324 farmers to grow soy. However, fewer than 100 replanted in 2013 in the absence of direct production credit or the promise of future irrigation improvement.[5] It is important to be transparent about how this estimate was derived. According to interviews and data provided by SFL, 70 farmers requested seed inputs in the second year of replanting, and of those, 20 returned the inputs. Thus the estimate is based on farmers who have interacted with SFL for inputs in the second year. It is possible that farmers have replanted without the project's knowledge. During interviews with SFL, it was also noted that some farmers might not be reporting replanting numbers due to the mistaken notion that they are obligated to sell to the soybean factory, whereas they might want to keep the harvest to themselves for animal feed. The evaluation team did not have the resources to quantify these claims.

Exhibit 3 provides summary intervention and production data for the project. In Takhar, farmers who do plant soy have experienced average yields ranging from 85.4kg/jerib (Dashti Qala, 2011) to 130.5kg/jerib (Dashti Qala, 2013)[6]

Unfortunately, any change in crop production methods (planting, cultivation, weed/insect control, irrigation, etc.) from what farmers have previously used and trust takes a full year to investigate – a crop takes almost a year from distribution of inputs to harvest. It also takes time for farmers to adopt new planting methods and new cultivation techniques. These farmers have income only from their crops and if they fail, their families could starve so one can see why farmers are cautious about adopting new crops and new farming practices – they have a lot at stake. Problems with weeding and insect control were also totally new to these farmers and agronomists and solving these problems will also take time.

[4] The figure of 5000MT was given to the evaluation team in an email communication on November 19, 2013, by Dayne Curry, the Afghanistan Country Director from SALT International, and was derived from averages of past production records at the factory. (Permission was given to the evaluation team to cite the country director directly)

[5] Data provided to the evaluation team by SFL in an email communication dated December 12, 2013

[6] According to data provided to the evaluation team by SFL in an email communication dated December12, 2013

Exhibit 3: Planting and replanting data*

Province	District	Year	No. farmers trained	Farmers receiving input packages	No. farmers planting in year trained	Planted land (hectares)	Average yield (kg/jerib)	No. farmers replanting in following year
Takhar	Dashti Qala	2011	1,012	1,012	891	124	85.4	5
	Dashti Qala	2012	3,091	2,385	2,020	226	103	50
	Dashti Qala	2013	1,289	802	791	Not available	130.5	N/A
	Baharak	2013	1,287	1,074	992	Not available	126.4	N/A
	Yange Qala	2013	1,620	1,164	1,100	Not available	129.9	N/A
Kunduz	Imam Shaib	2012	1,540	1,416	985	124	91.6	0
	Imam Shaib	2013	1,393	1,186	1,096	Not available	138.1	0
	Ali Abad	2013	1,495	1,035	847	Not available	96.7	0
Balkh	Shulagra	2013	130	107	107	Not available	61	0
	Dehadi	2013	36	36	32	Not available	54	0
	Dawalatabad	2013	47	47	37	Not available	45	0
	Nahre Shah	2013	60	60	41	Not available	45	0

* Data provided by Shelter for Life in an email communication with the evaluation team

According to ASA/WISHH and SFL, one of the key challenges the project has had in terms of yields is securing the right type of seed for soy cultivation in northern Afghanistan. Initially, SARAI imported 120–130 day Stine 3300 seeds, as this was the type of seed that was approved by the Afghanistan government. An early snow in October 2011 resulted in substantial crop loss. In 2012, the Stine 3300 were no longer available on the market and the government subsequently allowed a variety with a shorter maturity period (90–110 day variety). These varieties were evaluated in field trials and results will be made available in the future and will be taken into consideration for 2014 seed purchases. The evaluation team notes that prior independent research had established typical crop cycles, and the data showed that 120–130 day varieties would not fare well.[7]

SFL's selection of target villages could not be evaluated because written documents, criteria, or technical feasibility studies were not made available. The field team was told by SFL staff and public sector officers that selection was done through coordination and consultation with Community Development Councils (CDCs), and District Development Authorities (DDAs).

[7] A technical report written by JDA in 2008, recommends planting soybeans in April-May for harvest in August-September. However, the winter wheat that is normally planted in the project area is not harvested till May or June, delaying the planting time for soy. (Mark Henning, JDA International, Increased Productivity and Profitability Wheat Based Cropping Systems to Reduce Reliance on Opium Poppy in Northern Afghanistan, July 30, 2008, page 11.)

2. Production data from SARAI and other reliable sources do not demonstrate that locally-produced soy can be more profitable than alternative crops, or that soy can be locally sourced at contract prices that are cheaper than importation.

One of the challenges that the project faces in terms of production is that soy does not seem to be profitable relative to other crops commonly produced in the region at this time. Production data supplied to the evaluation team by SARAI staff indicates that soy is not more profitable than alternative crops at contract prices that warrant local purchase over imported supplies (**Exhibit 4**). All farmers interviewed for this evaluation reported that their income with soy was less than with other crops and when asked why they grow soy, many indicated that they expected future benefits of infrastructure and credit from the project as a kind of recompense.

Exhibit 4: Profitability of alternatives to soy after wheat[1]

Rank	Crop	Net income /Jerib in AFN
1	Tomatoes	35600
2	Rice	32200
3	Melon	28100
4	Watermelon	28100
5	Mungbean	15250
6	Sesame	14700
7	**Soybean**[2]	**11563**
8	**Soybean**[3]	**11393**
9	Cotton	10200
10	Cauliflower	9967
11	Carrot	7600
12	Soybean[4]	7333
13	Soybean[5]	3833
14	Corn	2900
15	Okra	1500

[1] This is a summary of data provided to the evaluation team by Shelter for Life via email communication (November 26, 2013)
[2] Soybeans at higher yield broadcast seeded with lower labor requirement
[3] Soybeans at higher yield with no insecticide in raised beds
[4] Soybeans with no fertilizer, no insecticides in raised beds
[5] Soybeans with fertilizer package DAP and potassium sulfate in raised beds

3. Independent scientific research and analysis by other agencies indicate farmers are unlikely to accept soy into their cropping system for many reasons, including excessive labor requirements over other crops, the inability of soy to produce a good yield in the soil, and weather conditions prevalent in northern Afghanistan where the project is operating.[8]

[8] The DFID-funded RALF project undertook extensive research on soybeans in Afghanistan in the mid-2000s, testing about 20 varieties. They also conducted extensive farmer training activities. The RALF reports are collected on the web site http://r4d.dfid.gov.uk/ and many of them reference the soybean work. The most salient summary is here: http://r4d.dfid.gov.uk/PDF/Outputs/RALF/RALF02-05JDAProgramofWork.pdf The participating organizations in RALF were (alphabetical order): Aga Khan Foundation, Afghanistan, AVRDC - The World Vegetable Center, Baghlan University, Balkh Savings & Credit Union, Catholic Relief Services, CAZS Natural Resources, University of Wales, Bangor Centro Internacional de Majaramiento de Maiz y Trigo (International Maize and Wheat

In 2008, Joint Development Associates (JDA) produced a report for the RALF project on crop research that the organization conducted to address constraints within the wheat-based cropping system of northern Afghanistan. As elaborated in **Exhibit 5**, the findings of the soy trials led the researchers to conclude that soybeans are not an appropriate crop for most of Afghanistan.[9]

Exhibit 5: Findings from 2008 JDA RALF project report that illustrate the challenges of soybean production in Afghanistan (quoted verbatim from the report)[10]

Our project initially had hopes that soybeans would have promise. However, after much research and evaluation we concluded that soybeans are not an appropriate crop for most of Afghanistan. There are several reasons for this:

- **The crop production cycle and available water means that soybeans do not fit profitably into the Afghan farming system.** Soybeans can be planted April-May, and then are harvested in August-September. They can also be planted as a second crop after wheat in June, and then harvested in about September-October, although yields can be lower....If a farmer has water then he will grow vegetables and fruit, some irrigated winter wheat and some forages. To plant soybeans in April means that land will have to be set aside the previous October, which means it is not planted to winter wheat or planted to an early spring vegetable crop such as cucumbers or tomatoes. It also means that land will not be available for a 2nd crop such as maize, or the mid-summer planted vegetables such as cabbage and cauliflower. Famers think in terms of what they can earn per unit area/time. Soybeans do not fare well in this thinking.
- **Planting and harvest labor intensive.** Without machinery, land for soybeans must be prepared with shovels as they are planted in ridge-furrow system, and planting and harvesting done by hand. JDA did try some mechanized planting and got reasonable stands, but yields were still low.
- **Low yields.** The average yields for 2005-2006 replicated trials conducted by JDA in Balkh were 1.2-1.5 mt/ha, which is low compared to yields in other countries.
- **Input issues.** A key benefit of soybeans is that as legumes they can fix their own nitrogen, thus adding nitrogen fertilizer is generally not needed. A bacterial seed inoculant is needed for soybeans to fix nitrogen. This inoculant is expensive and cannot be made in Afghanistan as the raw materials do not exist. This means farmers would have to buy nitrogen fertilizer, which increases the cost of production.
- **Market.** JDA had initially hoped to sell soybeans to a poultry farm in Uzbekistan that had trouble getting an adequate supply of soybeans. But because of low yields this was not possible. In Afghanistan if there is demand for soybeans, then it is probably best to import them from countries that can produce them more efficiently and cheaply.

Improvement Center), Coordination of Humanitarian Assistance, Cornell University, Danish Committee for Aid to Afghan Refugees, Afghanistan, Herat University, International Center for Tropical Agriculture, International Centre for Agricultural Research in the Dry Areas, International Crops Research Institute for Semi-Arid Tropics, International Development Enterprises, Joint Development Associates International, Afghanistan, Macaulay Research Consultancy Services Ltd, Mercy Corps, Ministry of Agriculture, Irrigation and Livestock, Afghanistan, Nangarhar University, Natural Resources Institute, Oxfam Novib, ProFound, Relief International, Tribal Liaison Office, Kabul, Afghanistan, United Nations Development Fund for Women, University of Balkh, University of Kabul, Washington State University, World Council of Credit Unions.

[9] Mark Henning, JDA International, (July, 30, 2008), Increased Productivity and Profitability of Wheat-based Cropping Systems to Reduce Reliance on Opium Poppy in Northern Afghanistan, pg. 12

[10] This text is taken from JDA International report referenced in footnote 7.

- **Cost of production too high.** With the amount of time and labor required, soybeans are not a profitable crop for Afghan farmers. In other parts of the world farmers, make money from soybeans on a large scale (in terms of land area) where they have precision machinery, necessary inputs, and a ready market. Afghan farmers typically have small plots of irrigated land, and there is no machinery and no market.

The lessons learned from this project's experience with soybeans are valuable in that it can strongly advise against any further encouragement of farmers growing soybeans in Afghanistan. JDA has been asked by other agencies, which have been approached by people wanting to promote soybean production, about soybean production and JDA has been able to advise against it, thus preventing the waste of development funding.

Based on individual interviews and focus group discussions with SARAI participants, almost all reported that soybean is not competitive with other crops. Farmers see soy as a difficult and unrewarding crop and this view is largely shared by local and expatriate agronomists. Agronomists and farmers question whether soy can be induced to grow well in a two crop farming system in Afghanistan that does not contain opium poppy because of the unsuitability of Afghan weather.[11] This problem does not arise with mung, which has a ready market, or with high-value vegetables that would be planted in the same season as soy. To illustrate the challenges of producing soy, a point-by-point comparison between soy and mung is outlined below (**Exhibit 6**).

Exhibit 6: Comparison between soybean and mung[12]

Parameters to Compare	Soybean	Mung bean
Planting method	Needs raised beds and furrows and planting seeds one by one	Simple broadcasting seeding in prepared land without need for raised beds and furrows
Weeding	2 or 3 times	No weeding
Water requirement /Irrigation	Up to 6 times depending on the nature of the soil	1-2 times irrigation maximum
Straw	No straw for animal	Provides straw for animals
Access to inputs	Not available in market (seeds and rhizobium inoculant)	Available in market
Market	No stable market. Must depend on ASF or NEI	Good market

[11] At issue is planting soy after wheat or rice which is a month later than optimal. To maintain a two crop calendar, soy must fit into a narrow crop window. The window is narrowed further when the autumn wheat planting and subsequent spring harvest are delayed.

[12] In response to this table, ASA noted the following: These are not the most relevant point as mung bean is not an oilseed and the project is in part responding to the benefits that would arise from the promotion of an oilseed (specifically soy) value chain--specifically the potential for local edible oil processing to which Afghanistan is completely reliant upon imports.

Furthermore, it ignores the point about the project being in large part a crop introduction project which means that demand for a crop will have to be promoted and may not be immediately supported independently by the market. By the logic presented here, no new crop would be introduced ever as there would be no initial demand for it, which ignores the point that demand can be created.

The evaluation team responds by pointing out the difficulties in convincing farmers to switch to a low profit crop and the shortfalls in SARAI project outreach strategies showing farmers how to raise soy profitably.

Yield	Lower than rice or mung	High compare to soybean
Market price 2013	203 AFN/7 kg	320 AFN/7 kg. Vegetable prices are even higher
Reliability	If planted too late will not make a good crop	Can be planted late with minimal risk

4. Without the prospect of adequate soy production, many stakeholders interviewed for this evaluation worry that there are a lack of incentives for the local project partner to maintain the Afghan Soy Factory or to promote soy production after the close of the project. In the absence of adequate yields and a stable market price, no data exist upon which to calculate the profitability of the Afghan Soy Factory.

Although Naseeb Group (the factory owners) expresses commitment to the project and willingness to support intensive production in Balkh in 2014, the company can be expected to make its business decisions based on a cost-benefit analysis of the situation. If it is determined that soy production is not feasible in the next few years, interview respondents noted that there is a risk that Naseeb Group will sell the factory equipment. Naseeb Group did not invest in harvest collection in Takhar and Kunduz in 2013 because production is low and transport costs are high. SARAI, working through PARSA and SFL, are handling the collection instead.

5. The production and processing activities of the value chain occurred in different provinces in a region of increasing insecurity. This location disruption added management and logistical burdens to the project that could have been avoided by co-locating production and processing.[13] In addition, a second soy-processing factory has opened in Kunduz, between Takhar and Mazar, that will likely undercut Afghan Soy Factory prices for Takhar products because transport costs are less.

SARAI and NEI (the production partner) decided to sever their relationship approximately two months before the start of the first soy planting. The evaluation team was unable to determine the reasons for this separation as stakeholders interviewed for this evaluation had different perspectives on the issue. However, consensus was that the loss of the production partner came at an inopportune time. As a result, ASA selected SFL as the new production partner (SFL was already contracted to undertake the irrigation and road activities). Interview respondents cited several reasons for the decision to concentrate production in Takhar, including SFL's prior experience in the region (albeit not in agriculture production), the fact that the irrigation and road work was to take place in Takhar, and the perception among some SFL staff that soil quality in Takhar is more conducive to soy production.

Takhar is nearly 100 miles from Mazar city, where the factory is currently located, and double that distance (in time) from the original factory site in Kabul. It is important to note that the decision to relocate the ASF to Mazar was due to ongoing security challenges with the original factory site in Kabul. The distance between production location and the ASF has led to challenges, including a struggle to foster a relationship between the factory owner and farmers, and higher transport costs.

[13] In response to this finding, ASA noted the following: The facility was not included in the original proposal. We did have to make changes over time as various challenges came forward. Production nearby existing SFL areas had benefits, and Balkh province was eventually added to the production component.

However, the evaluation team would like to note that the facility was in fact included in the Master Agreement.

3.3 Other Implementation Tasks

6. Road and irrigation system rehabilitation has been useful to beneficiaries and have been successful components of the project when viewed as standalone interventions. However, this work has not contributed to advancing the soy value chain, in part because of the distance between the production sites and the Afghan Soy Factory.

Irrigation rehabilitation

Per the Master Agreement, the project was to construct or renovate five irrigation systems. Project reporting indicates that ASA's partner, Shelter for Life, has exceeded project goals by constructing or renovating 28 irrigation systems. The evaluation team was not able to independently verify these stated project outputs due to time and security constraints. However, interviews with SFL revealed that the project exceeded its irrigation targets because some of the work involved gate rehabilitation (which is cheaper than rehabilitating a reservoir). In addition, SFL noted that communities provided volunteer labor, thereby reducing the cost of the work.

SFL's October 2013 achievement report notes a significant increase in production of other crops due in part to the rehabilitated irrigation systems. A section of the report is reproduced here (the evaluation team was unable to corroborate the findings noted in the report):

> *According to a random survey of 561 irrigation beneficiaries, 513 stated that they had increased the amount of irrigated land that could be cultivated for a second growing season as a result of the project, and all stated that irrigation efficiency on their land had improved. A total of 250 of the beneficiaries interviewed reported that they were growing crops for the first time in a second season as a result of the improved irrigation systems. The others mostly were only growing crops such as alfalfa and clover prior to the improvement in irrigation systems. After improvement of the irrigation systems, a larger number of farmers started to grow rice, mungbeans and soybeans.*
>
> *As part of the above mentioned random sample survey a 200% increase in tomato and other second season crops was reported.* (SFL SARAI Achievement Report, October 2013)

The field team visited two water intake irrigation rehabilitation projects in different villages in Bahark District of Takhar. Other visits were not possible for security reasons and the distance from Taloqan city. These intakes have been used by the farmers for a long time, and maintained by the farmers using traditional methods. **Exhibit 7** details some results of the rehabilitation effort as reported by farmers.

Exhibit 7: Results of irrigation rehabilitation as reported by farmers

- Before the reconstruction, the intake needed repair an average of 8–10 times each year. The new system requires less labor.
- The old style maintenance was highly labor intensive, requiring hundreds of people to work for one or two weeks. The new construction is easier to maintain.
- Previously, disputes arose with downstream communities because there was no mechanism to regulate the water flow. If water was needed, the farmers diverted all the water, disrupting the water flowing downstream. The new structures are better managed and these disputes no longer occur.

- Previously farmers were cutting trees and dropping them in the main canal to divert water to secondary canals. This is now no longer needed so there has been a positive environmental effect.
- Gates, checks and turnout structures function correctly but there are some complications resulting from SFL's rehabilitation efforts. In one example, the diversion point where water is pushed into one of the secondary canals is filled with loose soil without compaction or the planting of trees to provide a firm structure to the banks of the main canal. Subsequently the bank has been eroded by water, and erosion is progressing to the nearest foothill. Backfilling of the constructed and rehabilitated intake walls has not been done correctly and the areas behind the intake walls have filled with water, which threatens the durability of the construction.

Site visits to two irrigation rehabilitation sites revealed poorly chosen channels, collapsing banks, and soil erosion (**Exhibit 8**). This was due in part to soil not having been properly compacted behind the canal banks, and a lack of replanting of the protective vegetation that was uprooted during construction of irrigation and road structures.

It is not possible to assess the contribution of the rehabilitated irrigation systems to soy production However, these interventions have not contributed significantly to the soybean value chain given the distance between the production sites and the Afghan Soy Factory. In addition, the plan to scale down production in Takhar and ramp up in Balkh puts in question the long-term value of these projects in terms of the soybean value chain.

Exhibit 8: Rehabilitated irrigation systems that have been damaged as soil has eroded

Roads

Per the Master Agreement, SFL was to rehabilitate 35 km of roads. Project reporting indicates that SFL has exceeded targets by rehabilitating 51.47 km of roads.

The goal of the road construction was to allow transport to larger processing centers (including Mazar) as well as improve access sites to local markets. Second category gravel roads are common in rural areas of Afghanistan to connect villages with the main district road, which is typically asphalted. Interviews revealed that decisions on the development priorities were consistent to the local development plans. The provincial government officials endorse the effort because in theory it is a bottom-up approach.

In assessing quality, engineers generally examine thickness of gravel and compaction. Stakeholders interviewed for the evaluation expressed satisfaction with the thickness of gravel on rehabilitated roads. The construction engineer of the public sector Directorate of Rural Rehabilitation also expressed his satisfaction on the road quality.

SFL's achievement report from October 2013 outlined some of the benefits of the road construction (the evaluation team was unable to corroborate the findings presented below):

> *The road projects have connected more than 70 different communities to the regional, provincial, and national market and impacted more than 70,000 direct beneficiaries....The main outcome of this activity was to enhance agricultural trade by at least 50%. According to a random beneficiary survey of 323 road beneficiaries the time to market has decreased by more than half.* (SFL Achievement Report, October, 2013)

During interviews conducted with passersby along the reconstructed roadways, stakeholders responded positively regarding the road. For example, one traveler noted the appropriate thickness of gravel and spoke of how helpful the rehabilitated road has been. The road has been especially helpful during harsh weather conditions where it is otherwise difficult to transport agricultural produce or medical patients to the market or clinic.

The field team met many merchants in the Takhar provincial grain market. They mentioned that, in general, road rehabilitation projects are useful by improving ease of transportation of products to market. The total length road rehabilitated through this project was only a short distance and the merchants felt that they could not comment on the small part of a road that was rehabilitated.

While the irrigation and road rehabilitation work can be considered as individual achievements, some stakeholders feel that this work has not contributed to a sustainable soy value chain because the factory is located in another province.

7. The microcredit activity did not further the soy value chain. A response given by our admittedly small sample of farmers (4 of 6 farmers interviewed) is that they considered the microcredit component to be compensation for their financial losses related to soybean production. Farmers commonly used the loans for activities outside of soy production, such as investing in sheep. It is important to note that, per the Master Agreement, the microcredit component did not need to be exclusively tied to soy production.

According to SFL reporting, 863 original loans were provided to direct beneficiaries, and 374 paid back loans were redistributed to 374 borrowers as of August 2013, of which 1,152 loans were for farm inputs. In email communications with the evaluation team however, approximately 70 loan beneficiaries requested seed inputs to replant in 2013, and 20 of those returned the inputs instead of planting them. The main purpose of the microcredit activity should have been to assure that soy farmers have access to inputs. Microcredit loans and other financial implements are commonly used for this purpose. SFL seems to have developed a set of protocols for distribution of inputs and for the provision of microcredit that were not linked to increasing soy production. We found that some participating farmers considered the microcredit facility as compensation for their financial losses on soybean. Some farmers used the loans for different entrepreneurial activities.

Fair selection of the microcredit participants was difficult to analyze in the short time allowed because there is no clear written criteria for beneficiary selection. Overall, the approach appeared acceptable because the partners are working with local community development councils as their main entry point. Some basic rules were in place for microcredit, e.g., collateral as these loans were disbursed to groups of 10–15 members and each member had the responsibility to make them available to his group members as and when needed. It was difficult to link the loans with the stated purpose and there were few links to soy production. Additional measures would be worthwhile to ensure transparency on beneficiary selection.

Soybean production is mainly a male activity as they prepare the land, plant, and irrigate while the women take part in weeding, harvesting, cleaning, and less arduous jobs. The field team did not have an opportunity to talk with women farmers for cultural reasons, but project documentation and interviews with SFL staff indicate that 35% of the microfinance beneficiaries were female.[14]

According to the beneficiaries, the interest rate and payback times were appropriate. The interest rate was 10 percent, which seems lower than is commonly charged in Afghanistan and elsewhere.[15] The loan of 20,000 AFN was released in two installments, with 10,000 AFN in the first installment and a second installment of 10,000 AFN after six months. The SFL microfinance manager told the field team that nearly 100 percent of the loans are repaid, but that there is a problem with on-time payments.

8. The Afghan Soy Factory is operational, operational, largely due to the knowledge and experience of Sustainable Alternative Local Technologies (SALT), which was able to overcome numerous obstacles to get the factory running with minimal delays. However, the lack of locally produced soybeans puts the sustainability of the factory in question. To function at full capacity, the factory needs 330–430 MT per month (4500 MT per year) for soy meal. If the factory were producing soy flour, it would need 420 MT per month (5,000 MT per year). According to information supplied by SFL dated November 21, 2013, project farmers provided 161.4 MT of soybeans to the factory in 2013. The current intention is to turn the factory over to the Afghan business partners at the end of project implementation. Given a lack of in-country production, there is widespread speculation that inputs for processing will be imported or that the factory will be broken up and equipment will be sold after project completion

The factory seems to be doing well although its commissioning was a bit late. Indeed, the factory was cited as a key success story by WISHH staff:

> *...going from piece of land with nothing on it – to having the facility installed and having the building put in place to house it – it really has come a long way since beginning of program.* (WISHH staff)

The factory is still using USDA-supplied soybean, however. In order to function at full capacity the ASF needs 330–340 MT per month or 4,000 MT per year for soy meal. If the factory were producing soy flour, it would need 420 MT per month or 5,000 MT per year to function at full capacity. [16] If average production was 500 kg per jerib (.5 MT), 14-15,000 jerib[17] would be needed to keep the factory running at full capacity year round.

Indicative numbers can be chosen for financial calculations, but there is no way to estimate or predict a stable price for locally produced soy. This means that cost benefit analysis is not useful and that decision makers are working blind. A future stable price of Afghan soy cannot be estimated, making forward

[14] A female evaluator was in-country for the data collection. However due to security constraints, she was unable to travel to Takhar for interviews.

[15] For example, the Rural Microcredit & Livestock Support Program (RMLSP)/MAIL funded by IFAD is charging interest rates from 12% to 20% depending on the type of the product.

[16] Numbers supplied by SALT staff in an email November 19, 2013.

[17] Assuming that the average is 500 kg/jerib, provision must be made for farmers producing less than average.

planning, especially production contracts, more risky at all levels of the value chain.

Many stakeholders, including government officials and farmers, explained how important it is to develop an indigenous soy industry for animal feed. Afghanistan imports thousands of tonnes of poultry feed alone and the availability of locally produced ingredients and mixed feed would save foreign exchange.

The project competes with other soy buyers including NEI and private companies such as Rana Group. There are unconfirmed reports that the 2013 purchase offer is over US$ 700 per ton while ASF is paying just over US$ 500. In an interview for the evaluation, Rana Group management claims to be matching the NEI price in all markets. As Rana is collecting seed for sale, they can afford to pay more than processors.

There are also unconfirmed reports that NEI is not paying its farmers as promised due to cash flow problems. If true, this undermines the credibility of the ASF when seeking to negotiate future production contracts.

9. Despite being a task required by the Master Agreement, distributing soy flour without an existing market supply did not further the goal of a sustainable soybean value chain. The distribution diverted ASA management resources from other time-sensitive activities, including project set-up, the initial oil auction, renegotiating subcontracts, and sourcing and importing seed for the first planting season, tasks that were pressing for attention. A nutrition survey showed that beneficiaries had positive health outcomes in terms of nutrition maintenance, although the report acknowledged the methodological challenges in attributing health outcomes with the soy distribution.[18]

PARSA was responsible for the soy flour distribution and the cooking seminars and, per the Master Agreement and partner sub agreement, and indeed, monitoring data shows that 79.760 MT of soy flour was distributed.

PARSA and ASA were responsible for conducting a nutrition impact survey, the goal being to determine via handgrip strength analysis, whether, after four months of soy flour in the diet of participating women, there was any influence on health. The survey was conducted by a dietician, and it was reported to the evaluation team that beneficiaries saw positive health outcomes in terms of nutrition maintenance, although the report noted that it was not possible to directly attribute the change in health status to the soy distribution. Some interview respondents also noted the methodological limitations, given that there are a multitude of health factors to consider beyond soy consumption and, that the project did not have control over who ate the soy or how much was eaten. Meals are often shared and, there are reports of families selling their ration or giving it to animals. [19]

[18] In response to this finding, ASA noted the following: As per the proposal, the soy flour distribution was specifically targeted during the winter months when other foods may be less available. The winter ration was not linked to marketing activities.

[19] In response to this finding, ASA noted the following: Every evaluation on nutritional impact of food aid distribution would by its very nature have to have an assumption on actual consumption of food aid unless it was in a therapeutic setting where consumption can be monitored.

3.4 Marketing Soy Products

10. Based on interviews with a wide range of stakeholders, it appears that developing a market for soy meal and soy flour seems to present no important challenges. There is widespread belief among stakeholders that it is important to develop an indigenous soy industry for animal feed. This is supported by national import figures. Afghanistan imports thousands of tons of poultry feed alone and the availability of locally produced ingredients and mixed feed would save foreign exchange. The technical advantages of soy-wheat flour blends make it advantageous to bakers and consumers, thus supporting favorable market conditions. Bread bakers, pasta manufacturers, and confectioners expressed willingness to add soy flour to their product.[20]

Respondents repeatedly quoted high figures for monthly and yearly importation of animal feeds and feed additives. These numbers seldom matched each other, but were nonetheless very high. Without exception, respondents felt that this represented a high expense, huge loss of foreign exchange, and a vulnerability to the country.

Malnourishment is a well-known and pervasive critical problem in Afghanistan, particularly of women and children. Health issues related to poor nutrition are common. The addition of soy flour to diets would be an inexpensive way to add protein to diets.

11. The pilot activity of Physiotherapy and Rehabilitation Services for Afghanistan (PARSA) with women-owned community bakeries has not provided sufficient data to show empirical success. However, the bakeries do appear to be thriving and well accepted by the entrepreneurs. Based on observation and discussions with stakeholders, these bakeries seem to be a promising activity that could easily be replicated and that can be scaled at a pace paralleling the availability of soy flour.

The PARSA pilot activity in women's bakeries is a small activity within SARAI but it is one of its success stories.

A cultural tradition found across Afghanistan is the community bakery. These are often owned by women or husband and wife teams. These bakeries have two functions. First, the women bake bread that is kneaded and raised at home by women, collecting a commission of cash or bread dough. Second, the women bake bread for sale either at the bakery or the husband takes the bread to the market to sell.

PARSA has introduced 10 women bakers in Mazar and 10 in Kabul to soy-wheat bread formulations with good success. The soy-wheat breads stale more slowly than wheat breads and can be promoted as being more nutritious. Women bakers interviewed by the evaluation team report that they are happy with the innovation. The cost and availability of soy flour has proved to be problematic, however. One bakery owner in Kabul reported that she no longer used soy flour after the initial SARAI grant was used up. It is interesting to note that PARSA's system of providing initial production inputs to these bakers on a grant and microcredit basis is not seen by SARAI management or partners as a microcredit activity.

3.5 Management

12. SARAI has struggled with staffing capacity in-country. The project has had three country directors in

[20] In response to this finding, ASA noted that Afghanistan also imports over 90% of its edible oil.

three years and SFL has had five expatriate agronomists in the same period. There is a sense among stakeholders that leadership in-country did not have the requisite experience in agriculture or rural development to oversee the project. Short-term technical assistance has not been well managed and the consultants deployed, many of whom have been chosen from within ASA and affiliates, have been of uneven quality. Within SFL, the staffing gaps seem to have undermined implementation. In general, the number and technical background of the field staff was appropriate at the level of technical and support staff, but SFL leadership in Taloqan seemed to have been focused on infrastructure (road and irrigation construction) rather than on agriculture. This was likely due to the education background of staff and the organization's historical focus on construction. Soybean production, the most important SARAI component, and its attendant microfinance for production, seem to have received inadequate attention.

Many stakeholders noted the rapid staff turnover and lack of experience of some SARAI staff:

> *The first country director did not have agricultural experience. The tricky part in production is the farmers....the first country director had no experience with farmers, subsistence, or value chains. The second country director didn't have agricultural experience either.* (SARAI stakeholder)

> *What* [SFL] *needed was a production manager and a permanent lead agronomist, and in the first two years, there were four expat agronomists. It was a revolving door and it was extremely difficult to have follow through. You need continuity in the field with farmers.* (SARAI stakeholder)

13. This evaluation team did not assess NEI's capacity to produce soy, but the loss of NEI as the production partner in the first few months of implementation, (immediately before the first planting season) has had a negative impact on the possibilities of success for soy introduction.

During interviews, NEI and ASA each noted that they parted company within months of signing the Master Agreement because they could not agree on the terms of engagement. Outside stakeholders question the reasons for the split, but the results of the split are clear. NEI is not the most experienced development agency in Afghanistan and it is likely that they would have had trouble reaching a high production capacity in three years. By comparison, NEI has more experience with soy research and soy extension than SFL and, as such, might have been on the ground more quickly for the 2011 growing season.

14. Interview and observation data indicate that SARAI project goals, particularly related to the soy value chain, have been undermined by SFL's inadequate management of farmer training, microcredit, and road and irrigation rehabilitation. SFL's lack of appropriate skills and unwillingness to modify its own agenda and operating processes during SARAI implementation has contributed to the project's challenges.

If farmers are to grow soy profitably, they must be adequately supported by an agriculture extension system. The government does not include soy in its extension outreach program, although some projects are supplementing the government of the provincial agriculture offices to support soy.

Training of agriculture extension officers is crucial to establishing soy. As noted above, SFL provided training to 13,000 farmers. However, in some respects, the SFL extension program was not adequately conceived or delivered. This evaluation did not examine the details of the SARAI agriculture extension

staffing plan, the training regimen for staff, or the details of the extension visitation schedules. However, the poor farmer performance is indicative that extension activities might not have been adequate.

SFL did not incorporate accepted extension methodologies in its training program. The soy production training materials were prepared by U.S. experts familiar with the problems faced by non-mechanized farmers and are considered to be well done, although certain weaknesses have been identified. In particular, the introduction section does not adequately describe the benefits of soy production so that farmers are encouraged to grow it. The harvest and postharvest sections are thought to be weak as well. According to partner interviews, supplemental farmer training was needed in Takhar even in year 3 on when to harvest and how to do it. The farmers continue to harvest soy while it is green (immature) because that is how they harvest mung. The factory continues to accept immature beans but the quality of the resulting product is lower.

Rather than provide farmers with an in-depth course of training suited to their needs, SFL scheduled one-day exposure training that culminated with the presentation of a study booklet which presented acknowledged difficulties for illiterate farmers. ASA however noted to the evaluation team that study materials were produced which consisted primarily of photographs that were designed especially for farmers who may not be able to read.

In addition, some training courses were not conveniently timed to be accessible to the farmers. Farmers also noted that the demonstration plots took too long to visit, as they are not close to their homes, and hence would have taken valuable time away from their other production efforts. SFL follow-on visits and extension monitoring activities were inadequate in number and in technical content. The farmers complained that they did not learn how to grow soybean and they lost interest.

SFL took a short-term outlook to the production training activity and did not make the distinction between an input such as a training session and an output such as changed farmer behavior. SFL and others contend that they have fulfilled their task by training 13,000 farmers to grow soy, and that farmer retention is not within the project scope of work.

> *The target was 9,000 direct farmer beneficiaries and the indirect beneficiary target was 45,000 farmers' family members. SFL's goal was to provide soybean production management and training to 9,000 farmers over a three-year period. SFL exceeded this deliverable by providing training for 13,024 farmers in the three years, with 9,040 farmers planting soybeans in the three years.* (SFL final project reporting, October 2013)

> *I think SFL concentrated on training the 9,000 farmers. They had no time or people left to go back to the out-year farmers...so not much effort made to bring out-year farmers back.* (SARAI stakeholder)

15. The mid-term evaluation was delayed, which resulted in a lost an opportunity for learning. The technical midpoint of the project was April 2012.

There is a question as to whether SARAI is using its internal M&E system to provide direction to project implementation (discussed below). Some of the challenges noted in this report were appearing in the first growing season and were apparent by mid-2012. An evaluation at that time would have provided

useful insight into the implementation problems and perhaps might have made useful recommendations for improvement.[21]

16. The project has not taken steps to support amendments of regulations on commercially produced bread (commercial bakeries are licensed and regulated, community bakeries are not) needed to exploit the commercial bread market when soy flour becomes available.[22]

Commercial bread bakeries are regulated and there are constraints on the ways that soy-wheat bread may legally be sold. The project team, working perhaps through the oilseed and bakery associations, might have focused on the need to amend these regulations to allow the sale of more expensive soy-wheat breads, and begun appropriate lobbying efforts. In as much as consumers and bakers find the soy-wheat breads more convenient because they stale more slowly, these amendments might have been proposed as a labeling change only and passed with minimal effort.

17. Based on observation and interviews with SARAI staff and government staff, communication among SARAI partners and between SARAI and the Afghan government has been poorly managed. Self-identification of some partners with the SARAI project is minimal.

Rather than use a triangular consortium-style management approach with an Afghan-based Team Leader as the management head, ASA/WISHH used a horizontal approach with each partner operating independently of the others. A Country Director was expected to oversee the project while also carrying out ASA/WISHH's assigned tasks.

Communication between partners has been an issue. Each partner had its own office and was managed from ASA/WISHH offices in Saint Louis with minimal contact between partners. ASA/WISHH proved unable to maintain a unifying theme across project components and partners have gone their own way. Indeed, partners noted a lack of communication early on in the project. Only recently have partners come together for regular meetings:

> *We found out that our partners were not talking to each other. They were all siloed and there was no connection.* (ASA/WISHH staff member)
>
> *All partners were crying out for more internal coordination and that stymied the project from achieving full potential. There were tremendous opportunities for cross fertilization – learning*

[21] Please see footnote 1 for context provided by ASA on this point.

[22] In response to this finding, ASA noted the following: We are in the process of conducting a baking study to determine the optimum amount of low fat soy flour that can be incorporated into Afghan naan while maintaining total acceptability to local Afghan people. There would have been no way or reason for going to the GOA for amendments on the regulations on naan in Afghanistan UNTIL we know for sure what the percentage of our soy flour that can be put into the naan and the naan remain totally acceptable to Afghan nationals. There is still time to do this if deemed necessary but it appears that the more important question for commercial bakeries is 'will the addition of soy flour increase dough volumes/loaves per batch'. (The literature reports that it does for nonfat soy flour but this must be determined in the field for low fat soy flour.) We are hoping the higher yield in loaves per batch of dough will offset the cost of soy flour. Once we have completed the study - approximately January 30, 2014, these questions will be answered and can be dealt with.

In response the evaluation team notes that it was SARAI staff who on multiple occasions blamed the poor rise on the incorrect recipes provided by SARAI consultants.

from experiences and there was curiosity with the partners. (SARAI partner)

One key implication of this lack of communication structure is that partners struggled to see the linkages between the work tasks and the goals of the project:

> *Everyone had enough work to do on their own. But what the lack of communication led to was a lack of appreciation of understanding of the link between the soy factory and the farmers. A disciplined, regular form of communication was needed. What was generated was frantic last minute demands for information.* (ASA/WISHH staff member)

Fieldwork revealed a number of examples that illustrate communication breakdowns during the project:

- Example 1. NEI's issues with ASA stems from their perception, expressed to the evaluation team, that ASA changed the parameters of the project after signing and that, early in the implementation, the changes had distorted the project to the point that NEI's Board required that the organization withdraw.
- Example 2. Several times in the course of the fieldwork, when the evaluation team asked a question of staff from one partner about the work of another, the answer was, "I don't know what they do." This was true when we asked about PARSA's work and the work being done with factory soy flour in Mazar city.
- Example 3. "SARAI does not have a microcredit program," a staff member of SFL told the evaluation team. "SFL has the microcredit program." This "we-they" dichotomy among the project partners is common. Partners regularly answer, "I don't know, [another partner] does that" to seemingly simple procedural questions.
- Example 4. The field team was present during a meeting between senior project staff and H.E. DM Technical Affairs. The ASA/WISHH Kabul team was trying to get a signature on a document that amended the MOU signed between MAIL and ASA/WISHH replacing NEI with SFL for project implementation – 2.5 years after the change had taken place, which means in effect that the project had been acting illegally. Moreover, project staff were asking the DM to sign without getting prior approval.
- Example 5. Officers from MAIL and the DAILs mentioned several times that they had not received reports from SARAI about project activities. This is in contradiction to national policy.

An important indication of the communication challenges in the project is the differing perspectives stakeholders have with respect to the notion of project sustainability (discussed further below).

In addition, many observers outside the project express an opinion that an underlying objective of SARAI is to create a demand for imported soybeans and soy flour for the betterment of U.S. farmers. This might indicate that SARAI has struggled with external project communication.

3.6 Project Design

18. Interviews revealed that ASA and team members did not conduct operational feasibility, gross margin analysis, or value chain studies as part of the project design process. Independent scientific research and analysis by other agencies show that soy is unlikely to be accepted by farmers for

many reasons including excessive labor requirements over other crops and the difficulty of realizing good yields in the soil and weather conditions prevalent in northern Afghanistan.[23] There are doubts among those knowledgeable about agriculture in Afghanistan, about whether sustainable soy production will be possible in Afghanistan, regardless of project structure or implementation methodology, because growing conditions are not deemed suitable.

A logframe and program theory was not generated during project design, although portions of the Master Agreement function as a kind of logframe.[24] Without a value chain analysis, feasibility study or logframe/program theory, a comprehensive project approach was not developed to show the theory and logic behind the various interventions, how they are interdependent, and how they, together, contribute to intermediate results and longer term outcomes.

SARAI is intended to be a value chain intervention, with the various pieces of the intervention intricately linked from farmer production to market. However, a review of the Master Agreement and subsequent documentation reveals that a value chain assessment was not undertaken during project design or implementation. The sustainability of soy in the Afghan farming system seems not to have been questioned. Achieving high yields while maintaining a profitable two crop farming system that does not include opium will remain difficult in the northern tier provinces because of the peculiarities of Afghan weather, and the requirement to maintain a profitable two crop per year farming calendar.

Lack of a Comprehensive Program Theory: A comprehensive project approach was not developed to show the theory and logic behind the various interventions, how they are interdependent, and how they, together, contribute to intermediate results and longer-term outcomes. Without a program theory, it is difficult to develop a meaningful monitoring and evaluation plan, and indeed the project has not developed a comprehensive M&E plan to capture relevant information along the value chain that could in turn have fed into project decision making.[25]

Data Collection: In some respects, extensive data has been collected during project monitoring. For example, the level of monitoring conducted by SFL is commendable, and the evaluation team found that the reporting of field activities has generally been high quality. The organization has M&E tools, including structured questionnaires and templates for tracking data. During interviews, SFL staff noted that almost all monthly reports have been submitted on time. The reports were well filed and labelled. In some respects, the presentation of the data was difficult to follow. For example, to examine data with respect to drop out rates of farmers, it is necessary to review several spreadsheets and then aggregate the data. Inconsistent data was sometimes presented to the evaluation team.

Per the sub partner agreement, PARSA was required to complete pre- and post- knowledge tests on cooking seminar participants. During interviews, PARSA indicated that such testing was indeed conducted, although the evaluation team was unable to independently verify the statement. Staff

[23] See footnote 8 for agencies involved in such studies.

[24] In response to this finding, ASA noted the following: The Master Agreement is the USDA template, which cannot be changed. Some changes may be made annually by USDA Office of Legal Counsel. However, once language has been defined, it is applied across all agreements signed in a given year. The same applied to the proposal format is stated earlier in our comments.

[25] ASA has recently developed Key Performance Indicators to aggregate performance across multiple projects.

expressed reservations about the accuracy of this type of monitoring because most of the women who participated in the cooking seminars were illiterate, making a written test infeasible, although a follow up discussion with ASA revealed that, while PARSA was asked to do pre and post testing, they were not required to do it in writing.

Use of M&E Data: While there is a consensus that the project did not properly develop outcome level indicators to track results, most stakeholders feel that, in many respects, the project has collected robust M&E data at the output level. However, most stakeholders interviewed for this evaluation also felt that M&E data was generally not used to inform project decision making.

Perhaps the most pressing issue identified from M&E activities was the challenges related to farmer retention. M&E reporting indicated that farmers were unhappy with soybean prices and were not replanting soybeans. However, there is a concern among stakeholders that this data was not used to make key project decisions.

> [The use of M&E data] *has not been great. Some data was collected just to be collected. In some cases it was used for reporting, so was a confirmation of where we are supposed to be. But in other cases, such as the farmer retention issue, SFL has a whole spreadsheet and they show which farmers sold yields for how much. So the information was there, but it wasn't utilized in a way to change something in the following year.* (SARAI stakeholder)

The evaluation team was unable to assess definitively why M&E data was not used fully. However, interviewees noted that sustainability was not a focus of the project design, and that the project has been in 'crisis management' mode, with limited resources put towards strategic planning. As one stakeholder noted:

> *We had gaps that we did not anticipate. By the time they were identified, we didn't address them as quickly as we should have. Things don't stop moving just because you have identified a gap. So we needed to keep things moving.* (SARAI stakeholder)

19. Some SARAI partners feel that sustainability was not integrated into the original project design and that the discussion of sustainability has just arisen. However, a review of design documentation and other records shows that sustainability was indeed a key aspect of the initiative. It is important to note that because the project has not internalized program theory, stakeholders have quite different interpretations as to what project sustainability means. One key gap in terms of project sustainability has been a lack of focus on sourcing viable seed inputs.

ASA/WISHH staff feel the project work plan and partner activities are aligned with the Master Agreement, but others feel that, as the SARAI partners have not addressed sustainability, the project has gone off track. Some felt that sustainability should be assessed by looking at individual project components, and not defining sustainability in terms of the project value chain. For example, some stakeholders feel that the sustainability of the factory need not be predicated on 100 percent locally grown soybean production, and that the factory aspect of the project should be seen as successful even if it requires inputs from out of country:

> *If the factory can't rely 100% on locally produced soybeans, if [local production] can't fill capacity, we don't look at it as a negative.*

Others however, see sustainability in terms of the entire value chain.

> *Sustainability would have been to create a viable ongoing production base for this plant, and then develop the market for the products.*

Many ASA staff and partners suggested that sustainability was not properly defined at the outset of the project.[26]

> *Sustainability is something that has to be discussed and decided before a project gets off the ground, but to shift the goalpost on sustainability more than halfway through the project – you are going to get fair results at best because it wasn't built into the process from the beginning.*
>
> *The issue is that farmers are not producing in the second year, but the Master Agreement calls for training 9,000 farmers, so SFL delivered what was in the Master Agreement. But now USDA is moving the goalpost and wants sustainable production.*
>
> *The Master Agreement was clear. But the challenge was that it was driven more by data than results. The requirement was to train 9,000 farmers. There was nothing on retention. So we knocked out the requirement, but was that appropriate measurement for project? And we got scolded by USDA about not focusing on sustainability. But we told them - you approved this.*

A review of the original Master Agreement shows that indeed, sustainability is one of the goals of the initiative. The agreement contains a list of output and outcome criteria to measure progress towards project objectives on pages 15-19 (**Appendix 6**). The evaluation team reviewed the list of criteria and found them to be explicit, if overly ambitious. However, these criteria were not operationalized into the project work plan or incorporated into an effective M&E system. ASA incorporated sustainability language in its public documentation.

> *The project design was strategic in the fact that it not only sought to address immediate humanitarian needs arising from the conflict, but sought the reestablishment of livelihood opportunities through the promotion of the soy value chain in Afghanistan.* (SARAI brochure, January 2013)

20. According to project documents, farmers were to be provided with inputs, including soybean seed and inoculum, during their first year of production. The partner agreement between ASA and SFL (dated March 12, 2011) indicates that SFL was responsible for sourcing locally available soybean seeds for inputs after the first production year. The evaluation team was unable to document efforts by the project to source locally available soy seed. Rana Group says indicates it is planting soybean for seed production but we do not have an indication of the amount they are aiming for or their success or the price at which the seed will be offered.[27]

[26] In response to this finding, ASA noted: Sustainability was undefined--we are facing competing visions of sustainability that has caused the goalpost to move during the course of implementation.

[27] In response to these findings, ASA noted the following: This was not the case. There were no locally available seeds in 2012 - what was intended by this was that the funds for procuring soybean seeds for 2012 and 2013 were in the SFL budget. It was always known that the seeds would have to be imported all 3 years. In fact, we made arrangements with the Denton

Many stakeholders interviewed for the evaluation felt that the inputs strategy was ill conceived in terms of providing free inputs in the first year, and then not providing meaningful incentives in the second, especially when year one yields were low and not profitable for the farmers.

> *One of the things the project did was give farmers free inputs in year one and there was a year two option to borrow money to purchase inputs. Maybe that will have to change in the future. If farmers had other incentives, they might come in.* (SARAI stakeholder)

> [The project] *gave away the input bundles, and I don't believe this is the right way. In my model, the processor buys the inputs and sells to the farmer on third payment terms and pays when they sell to the processor. But the current way – when you give farmers stuff they don't always appreciate or value it.* (SARAI stakeholder)

According to project documents, farmers were to be provided with inputs, including soybean seed and inoculum, during their first year of production. The partner agreement between ASA and SFL (dated March 12, 2011) indicates that SFL was responsible for sourcing locally available soybean seeds for inputs after the first production year:

> *It is presumed that locally grown soybean seed will be available to SFL and the farmers. It is the responsibility of SFL to determine this local availability of soybean seed as soon as possible so that alternate arrangements can be made in case local seed does not materialize.* (ASA/SFL Agreement, March 12, 2011)

The evaluation team was unable to uncover any evidence of an attempt by the project to source locally available soy seed. Rana Group says that it is planting soybean for seed production but we do not have an indication of the amount they are aiming for or their success.

Nodules do not form readily under Afghan conditions so the nitrogen-fixing attributes of soy (and other pulses too, it must be said) are not realized. Rhizobia do not overwinter in the poor soils and must be introduced each year. Inoculants are not produced in Afghanistan and so must also be imported and distributed each year.

3.7 Fulfillment of Goals as Outlined in the Master Agreement

The sections above discuss project implementation and results in the context of developing a soybean value chain. Some project activities have achieved positive results when viewed as standalone interventions. These project successes have been noted throughout the body of the report. Additionally, ASA has provided a table that summarizes what they interpret to be project successes. This table is presented in **Appendix 7**. The information provided in this table has not been corroborated by the evaluation team.

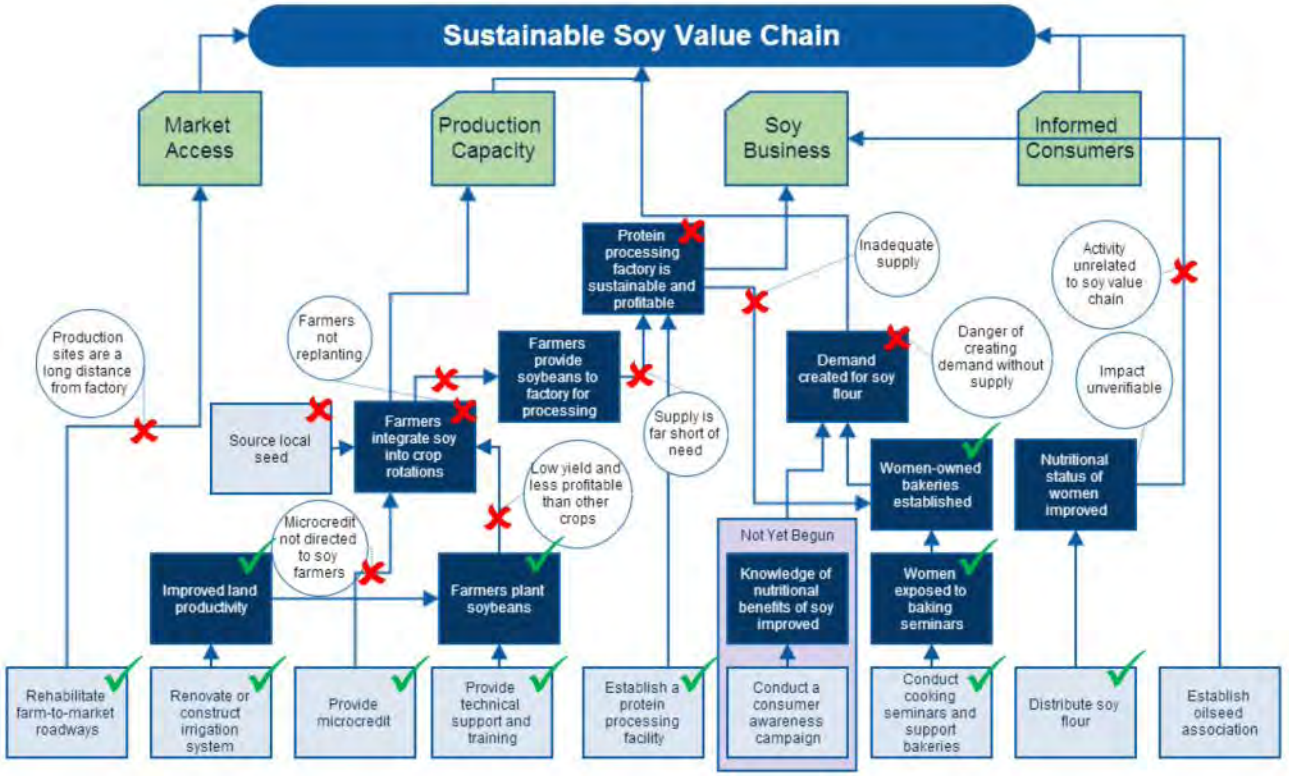
Program/DOD for transporting 3 years' worth of seeds. In 2011 ASA purchased the seeds and shipped same on the DOD flights for 900 farmers because Dr. Kwon of NEI would not turn over the seeds which he had purchased and shipped on behalf of ASA. That is why there were only approximately 900 farmers in 2011. In 2012 and 2013 SFL issued the purchase orders and paid directly for the Stine and Albert Lea seeds. There was never any plan for SFL to "buy local seeds - they did not exist".

It is important to note that, even with the activity level successes noted throughout this report, and presented by ASA in **Appendix 7** many of the higher level outcomes and goals as outlined in the Master Agreement have not been fulfilled. For example, the following outcomes and goals have not been achieved during the project lifecycle:

- Increase soy yields by 30%
- Train 3,000 farmers per year (the assumption being that the one-day SFL exposure meetings are not the same thing as ensuring that a farmer is properly trained and acting on the training)
- Protein processing facility is sustainable and profitable
- Increase soy production from approximately 500 acres to 4,500 acres
- Increase demand for soy products with 10 commercial companies using soy flour in their products

Exhibit 9 illustrates the key findings of this report, showing project successes and challenges with respect to the soy value chain.

Exhibit 9: Soy Value Chain Showing Project Successes and Challenges



4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Conclusions are presented to correspond with the evaluation questions.

To what extent does SARAI design align with the problems and goals outlined in the Master Agreement?

- While the project has had some stand-alone successes, overall the SARAI design does not align with the problems and goals outlined in the Master Agreement with respect to the creation of a sustainable value chain for soybeans. The project was hampered by not being based on a program theory and therefore the overall design has significant flaws. The partnership arrangements did not support a coordinated effort among the partners. The timing of the loss of NEI as a partner crippled implementation.

To what extent have SARAI interventions been effectively implemented?

- SARAI has completed and is operating the soy processing factory.
- SARAI has effectively monetized donated soy products with the exception of the first year when outside issues interfered.
- SARAI has undertaken irrigation, road rehabilitation, and microcredit activities. However, these activities have not been effectively integrated into the soy value chain.
- SARAI has not introduced profitable soy production.
- SARAI has not deployed staff effectively.
- SARAI has not developed an effective M&E system to monitor and control project implementation.

To what extent have the project interventions been effective in meeting stated objectives and contributing to expected impacts?

- The production challenges besetting SARAI are such that the initiative will not be able to achieve its goal of developing a sustainable, local-production-based soy value chain in Afghanistan within the time allotted. Even with a no-cost extension, the value chain is too complex and underdeveloped to allow the project to achieve its goal.
- The project runs the risk of promoting demand for soy products in the absence of supply. Excessive demand can swamp businesses, especially young businesses. The local partners will begin to run the factory based on imported materials, thus perhaps undermining local production. If demand is not met, consumers will lose interest and substitute other products.

What can be expected to be the long-term results of the ASA/WISHH intervention?

- It is difficult to estimate the long-term impacts of some of the stand-alone project successes. However, given the inability to develop soy production, and independent research that indicates that soy is unlikely to be accepted by farmers into their cropping system, we conclude that it is unlikely that the ASA/WISHH intervention will result in a sustainable soy value chain.

What are the lessons learned from SARAI that might help ASA/WISHH be more successful in similar

interventions in the future?

- A number of lessons have emerged as a result of the SARAI initiative that might help ASA/WISHH be more successful in similar interventions in the future:
  - Conduct a feasibility study prior to project design
  - Develop a program theory and logframe to show the theory and logic behind an intervention
  - Develop a comprehensive and meaningful monitoring and evaluation system that is informed by a program theory and logframe. Establish a system to use monitoring data to inform decisions throughout the project lifecycle
  - Put a communication strategy in place to ensure project staff and key partners are all working together to support the intervention
  - Ensure that the skills of project staff and partners align with project needs

What influences from other actors in the soy value chain have enabled or constrained program implementation and results?

- The volatile security situation resulted in a fluid and unpredictable project environment, which has compounded implementation difficulties.

4.2 Key Recommendations

1. The proposed one year, no-cost extension should be approved on the condition that remaining project resources are directed to providing a proof-of-concept demonstration in Balkh. This demonstration should be on large mechanized farms and on small farms among SARAI's previously recruited and trained cohort of farmers. This demonstration should include significant investment in staff, outreach, and training, and publicity from the local partner. If 2014 production figures from small and large farms are sufficiently high (yield and profit relative to competing crops), an argument could perhaps be made that a profitable soy industry is possible.

2. The project should undertake team-building exercises with project partners to develop a program theory, logframe, a 2014 work plan, and a comprehensive M&E plan to reconstruct project history and to monitor the fourth year of the project.

3. Despite the concentration of efforts in Balkh, some obligations in other locations may remain. SFL should be given SARAI resources in Takhar and Kunduz sufficient only to fulfill contractual obligations already in place, and these obligations should be fulfilled using SFL permanent staff, with SARAI budget support as needed. SFL's SARAI staff and activities should be moved to Balkh entirely to participate in the proof of concept demonstration.

4. When developing its staffing plan for 2014, ASA/WISHH should consider eliminating the positions of Country Director and Production Director, especially if SFL continues to be the agronomic lead. An in-country Team Leader, with an appropriate in-country support team, should be sufficient to handle the remaining project activities and closeout.

5. To facilitate communication within the project and to support the intensive effort in Balkh, the project office should be moved to Mazar and SARAI partner agencies should share office space. The

project should develop a robust internal communication system to ensure regular communication among key partners throughout the rest of the project. The project should initiate regular and frequent interaction with relevant government offices.

6. Given the volatility in staffing of the agronomist position to date, the project should consider employing Afghan nationals with soy experience to handle outreach. This staffing could perhaps be managed on a cooperative or loan basis, although a more sustainable option would be for the local partner to recruit and hire their permanent agronomists at this time.

7. For publicity purposes and to facilitate nutrition education while not increasing the demand for soy flour beyond availability, the women's bakery pilot project should be expanded, particularly in Mazar, within the project and support offered to other agencies for expansion of the activity.

8. To gain a wider perspective on agriculture production in Afghanistan, future short-term technical assistance should be recruited from outside ASA/WISHH and its affiliates in order to provide situation-relevant knowledge and skills.

Appendix 1. Statement of Work

REQUEST FOR EXPRESSION OF INTEREST

The American Soybean Association is requesting proposals from organizations and/ or individuals to conduct a mid-term evaluation of a USDA/FAS Food for Progress activity in Afghanistan.

I. BACKGROUND

The American Soybean Association (ASA/WISHH) received funding from USDA/FAS Food for Progress to implement a three year agricultural development project in Afghanistan. The Soybeans for Agricultural Renewal in Afghanistan Initiative (SARAI) agreement was signed on September 30, 2010, with ASA/WISHH as the prime. The initial 3-6 months focused mainly on getting up and running and getting commodities monetized so that funds were available to begin program implementation. As part of the project, ASA/WISHH entered into sub-recipient agreements with three organizations, Shelter for Life, SALT, and PARSA. ASA/WISHH also has a monetization agent, CBI.

The SARAI project was written with the intent of creating a sustainable oilseed value chain by implementing interventions that support four objectives, including:
Objective I: Increase the production capacity of targeted farmers
Objective II: Increase farmer access to markets
Objective III: Increase capacity to process and sell locally produced crops, contributing to the creation of sustainable business opportunities
Objective IV: Improve the nutritional knowledge and status of targeted community leaders, health sector workers, food processors, vulnerable individuals, and end users

SARAI has about ten interventions along the soy value chain, most of which are inter-connected in some way. These activities include:

- Rehabilitate 35 kilometers of farm-to-market roadways
- Renovate/ construct five irrigation systems
- Provide micro-credit loans to 600 farming families
- Provide training in the production of soybeans as a rotation crop to 9,000 farmers
- Establish a protein processing facility
- Provide technical assistance to develop, package, and market various foods produced by the newly established protein processing facility, as well as millers and bakeries.
- Establish an oilseed association
- Complete a nutrition education/ consumer awareness campaign to increase knowledge of general nutrition and the health benefits of soy
- Provide nutrition information and cooking seminars to 10,000 pregnant/ lactating and vulnerable women identified in collaboration with the Ministry of Women's Affairs
- Distribute a winter ration of soy flour to 5,000 pregnant/ lactating women

As part of the Master Agreement between ASA/WISHH and USDA/FAS, ASA/WISHH is required to undertake both an external mid-term evaluation and a final evaluation. The overall aim of this RFP is to identify and contract with a firm or individual to conduct the mid-term evaluation.

II. METHODOLOGY

The mid-term evaluation will be conducted in several phases:

Phase 1: This phase will focus on data review and mid-term evaluation design. Documents to be reviewed include the Master Agreement, semi-annual donor reports, ad-hoc reports, success stories, monthly reports from sub-recipients, monetization reports, and technical consultant reports. During this time, the technician may also interview several stakeholders, including U.S. based ASA/WISHH, donor, and ASA/WISHH sub-recipient staff. During phase 1 the technician will also finalize their design plan for the mid-term evaluation.

Phase 2: Phase two will take place in Afghanistan (mainly in Kabul, Takhar, and Balkh). The technician will meet with multiple stakeholders that are involved in, coordinate with, and/or benefit from the SARAI project. During this phase, information will be gathered through one-on-one meetings, focus groups, site visits, and/or a review of documents available at the field level. Meetings and areas of investigation include:

- Meet with all sub-recipient partners- Shelter for Life, SALT, PARSA, CBI;
- Meet with collaborating partners- Oil Crops Growers Association of Afghanistan, the Naseeb Group, Naanwahee Associations in Mazar and Kabul;
- Meet with government representatives- USDA/FAS, Ministry of Agriculture, Industry and Labor, Ministry of Women's Affairs;
- Review monetization procedures- Includes process for auctions, bids, tenders, final price received, ways in which challenges were addressed;
- Review consistency of activities, outputs, and outcomes compared to the description in the Master Agreement;
- Review in-country office financial records and receipts;
- Review available financial reports and confirm accuracy of expenditures against activities in the field;
- Review implementation to date of all activities against planned implementation timetable;
- Review and verify that ASA/WISHH is on track to achieve the targets outlined in the Master Agreement;
- Verify the number of people that have received distributions, and review procedures for identification of beneficiaries, distribution, and signatories at pick-up;
- Review training modules used in various activities, and note logical flow, appropriateness, and how information was presented;
- Meet with beneficiaries of commodity distributions and training for several activities (including cooking seminars, soybean production, and training for micro-credit recipients);
- For micro-credit component, review average size loan and use of loan, loan terms, and appropriateness;
- For agricultural production, review issues related to measuring improved crop yield, farmer contracts, contract pricing, and sustainability for farmers securing inputs in the future;
- Review all aspects of commodity storage, including warehousing, stacking, waybills, use of bin cards, cleanliness, ventilation, signs of infestation, warehouse security, handling of damaged commodity, losses;
- Visit the main market to collect market data/ intelligence, including commodities available, prices, origin of commodities, supply/ quantity, quality of commodities for sale;
- Review any monitoring documents compiled at the field level;
- Assess the capacity and appropriateness of staffing of ASA/WISHH and local partners, including

documentation on hand;
- Overall appropriateness of project concept and approach;
- Appropriateness of selected road rehabilitation and irrigation sites and methodologies employed in that process;
- Review overall monitoring and evaluation plans and tools and assess their utility for monitoring project implementation, achievements, and outcomes and make recommendations for the final evaluation.

During this phase, interview tools and/or questionnaires should be shared with ASA/WISHH prior to use.

Phase 3: This phase will consist of collating all available documentation and notes from travel to Afghanistan into a coherent report. This phase will take place in the United States, and during this time the technician may continue to reach out to individuals in the United States and in Afghanistan for any additional data needed, and/or to confirm/ clarify any observations or findings.

III. PURPOSE AND SCOPE

The purpose of this evaluation is to provide a detailed picture of the existing progress of the project against stated objectives and outcomes. This is to be achieved by addressing several key questions, including:

Are the interventions effective in meeting stated objectives and outcomes?
Are the interventions meant to be sustainable going to be sustainable? If not, what are proposed changes to increase the likelihood of sustainability?
Are the interventions relevant given the proposed problems?

The deliverable is a mid-term report that documents all findings, and should include the following components:

Title page

Table of Contents

Acronyms

I. Executive summary

II. Background

III. Purpose of mid-term evaluation

IV. Methodology- include overview of design, as well as strengths and limitations of methodology

V. Key Findings- detailed by activity, in addition to monetization, commodity management, and financial conclusions. This section should also include demonstrated impact (or evidence of potential for long-term impact) in the project activities

VI. Best practices/ lessons learned

VII. Recommendations- This section should include recommendations for specific improvements from mid-term to project closure, and evidence of sustainability or potential pathways to sustainability in the various project components

Annexes- To include technician's SOW, survey instrument/s, key informant questions, itinerary detailing documents reviewed and people met

IV. ASA/WISHH EVALUATION MANAGEMENT

M&E within ASA/WISHH is overseen by a small M&E division. This division is responsible for overseeing the drafting and release of this RFP, soliciting responses, helping select the final candidate, drafting the final contract, and keeping the progress of this solicitation on track. This also includes providing support as necessary, providing feedback on evaluation drafts, serving as a liaison as necessary, and giving approval for the final finished evaluation report.

The M&E division works closely with other divisions that will be heavily involved in the mid-term evaluation. The operations division oversees all aspects of project implementation, including contracting and compliance. This division includes the Director of Operations, Program Manager for Asia, and the Program Officer for Asia. The evaluator/s will meet with all three of these division staff as part of this evaluation.

ASA/WISHH also has an office in Afghanistan that is staffed with a Country Director, Deputy Country Director, etc. The evaluator/s will meet with any staff as necessary in Afghanistan to effectively complete the evaluation.

Both the operations division and Afghanistan country office will provide inputs for selecting a final candidate to conduct the evaluation, provide feedback on proposed questionnaires, and provide comments on draft evaluation reports.

V. SCHEDULE

June 18- Release of solicitation
July 8- Expressions of interest due
Week of July 8 - Proposals reviewed. Only semi-finalists will be contacted for interview.
Week of July 15- Contract negotiated and completed
July 22- August 5- Review of available data (Master agreement, donor reports, SARAI brochure piece, sub-recipient reports to ASA/WISHH, nutrition survey reports, auction reports, etc.)
August 12-16- Final review of available data and brief with USDA/FAS Washington DC and ASA/WISHH Washington DC
August 17-Sept. 7- It is envisioned that approximately 2-3 weeks of time will be spent in Afghanistan, depending on the program design.
Week of September 9-Telephone de-brief of trip findings with USDA/FAS Washington DC and ASA/WISHH Washington DC
September 20- First draft of mid-term evaluation report
September 30- Final mid-term evaluation report submitted

VI. EXPRESSION OF INTEREST SUBMISSION

Expressions of interest should not exceed 5 pages, and must include the following to be considered:

1. Short overview of evaluator/ company

2. Approach to the review process
3. Organizational chart of team completing the work
4. Proposed Scope of Work
5. Description of similar projects completed/ past performance (be prepared to share samples of previously completed evaluations)
6. Fee schedule and proposed fee to accomplish the work
7. Experience in Afghanistan is a must, and should be briefly detailed in the submission
Evaluator/s should have at least 10 years of experience in the field of development evaluation, in addition to experience in international development.
Semi-finalists will be contacted for interviews.
The proposed submission should not exceed $50,000
Expressions of interest should be submitted electronically by close of business on July 8 to wishhdc1@yahoo.com, apoock@soy.org, and timothyscummings@gmail.com.

Appendix 2. Evaluation Work plan

Phase	Task	Details	ASA Role	EnCompass Role	Timeline
DESIGN	Design and planning	Project launch meeting	Schedule and participate in meeting	Prepare agenda to review expectations, timeline and project goals	Oct. 9
		Data collection strategy meeting	Schedule and participate in meeting	Prepare agenda to discuss data collection strategy	Oct 15/16
		Allison in DC for design work			Oct 15-18
		Draft evaluation design presented for approval	Review, comment on and approve plan	Prepare and submit for review	Oct. 18
		Data collection tools designed		Design tools	Oct. 17-18
		Deliverable 1: Final Evaluation Design			**Oct 21**
		Data collection tools presented for approval	Review, comment on and approve tools	Prepare and submit for review	Oct. 22
	Desk review	Master Agreement, semi-annual donor reports, ad-hoc reports, success stories, monthly reports from sub-recipients, monetization reports, and technical consultant reports	Provide necessary documents	Review and compile data	Oct 11
DATA COLLECTION	US Based interviews	Interview several stakeholders, including U.S. based ASA, donor, and ASA sub-recipient staff	Provide list of interview subjects and support scheduling	Conduct interviews	Oct. 21-25 (or later if Government is not open)
	Travel	Allison Brown travel to Kabul			Oct. 23

Phase	Task	Details	ASA Role	EnCompass Role	Timeline
	Field work (12 days in country, including internal travel and weekend days)	K. Yousafzai fieldwork in Takhar	Support access to participants and scheduling	Conduct interviews, focus groups and gather additional documents	Oct. 26-29
		Fieldwork in Kabul (A. Brown for five days and K. Yousafzai for one day)			Oct. 27-31
		Fieldwork in Mazur/Balkh (A. Brown and K. Yousafzai)			Nov 1-4
		Final meeting day in Kabul			Nov 5
		A. Brown return to Laos			Nov 6
	Debrief with USDA and ASA	Fieldwork debrief via Skype	Schedule and participate in briefing	Conduct debrief	Nov 11-12
		Deliverable 2: Activity Report			**Nov. 13**
ANALYSIS AND REPORTING	Data analysis	Data coding and thematic analysis. Initial draft writing		Conduct analysis and writing	Nov. 7-16
	Draft report	Submission of draft report	Provide comments on draft report (by Dec 4)	submit draft report	Nov 27
	Learning/Feedback session	Discuss report recommendations and implications	Participate in session	Facilitate session	Dec 4-6
		Deliverable 3: Final Report			**Dec 12**

Appendix 3. Evaluation Questions/Data Collection Matrix

Sub question	Encompass Strategy to Evaluate	Illustrative Measures/Indicators/Notes
1. Project Design/Approach: To what extent does the SARAI design align with the problems and goals outlined in the Master Agreement?		
Extent to which Master Agreement is logically consistent Extent to which project activities follow logically from problem and goal statements	Review project documents and project reporting Reconstruct illustrative logframe	Degree to which various interventions are relevant given the problems proposed in the Master Agreement
2. Project Implementation: To what extent have SARAI interventions been effectively implemented?		
Extent to which ASA and Partners have the right staffing patterns, management structure, and communication strategies in place	Interviews with ASA and partner staff Interviews with USDA Review organograms	Degree to which ASA and program staff perceive that the interventions are appropriately staffed and managed, and that communication is effective.
Extent to which ASA and partners have designed and used an effective and comprehensive M&E reporting system	Review M&E plan Review M&E reports Interview ASA and partner staff Interviews with USDA	Degree to which existing M&E activities align with contract requirements and general M&E best practices Degree to which ASA, partners, and USDA perceive existing M&E activities to be of high quality
Extent to which project interventions have been successful	Review relevant documentation Interview ASA staff, USDA staff, program partners, Afghan government stakeholders Visit sites: markets, the rehabilitated road, the protein	Production Adequate numbers of male and female farmers have been recruited at the proper locations Production training, production inputs, and

	processing facility and warehouses, and farmers Focus groups with project beneficiaries	extension follow up were delivered on time and in sufficient quantity Farmers learned the basics of soy production Crop budgets indicate that projected profits make soy competitive with other summer season crops that would be grown on similar locations. Farmers reinvested in soy production in follow-on years. <u>Irrigation</u> Length of canal rehabilitated to date and projections for the coming year meet expectations Main canal was repaired correctly Older distribution canals are repaired correctly New distribution canals are correctly placed and constructed Gates, checks, and turnout structures function correctly Drainage system for fields have been built and are complete and correctly placed Farmer-led maintenance procedures are in place and protocols are being followed Degree to which reported quality and usefulness is valid <u>Road</u> Degree to which stakeholders perceive the road rehabilitation activities were efficient and

		effective Degree to which professional engineers are satisfied with the quality of the road construction Degree to which stakeholder feel that the road that was rehabilitated was in a useful location Degree to which reported quality and usefulness is valid <u>Microcredit</u> Degree to which the microcredit program was designed to professional standards Degree to which interest rates are correct Degree to which participants are chosen fairly Degree to which microcredit rules are administered fairly Degree to which loans are being used for the stated purpose Degree to which loans are being repaid on time and in full <u>Markets</u> Number and kinds of market training provided to farmers Degree to which merchants feel that the rehabilitated road has been useful Degree to which merchants procure animal feed from soy processing facility <u>Oilseed Association</u> Degree to which the Oilseed Association is

		effective and representative of farmer needs Protein factory operations The protein factory construction and operation are on schedule The various products being produced by the factory are to the correct standard Projection of factory operation cost and throughput are equal to or better than anticipated Facility and Warehouse construction and management Assessment of facility/warehouse conditions based on criteria developed by ASA Soy flour distribution and nutrition training Degree to which stakeholders perceive the distribution and related training to be effective and helpful
Lessons learned to improve project implementation	Interviews with ASA staff, USDA staff, program partners, Afghan government stakeholders, beneficiaries	
3. Contribution: To what extent have the project interventions been effective in meeting stated objectives and contributing to expected impacts?		
Extent to which project activities have contributed to change	Interviews with ASA staff, USDA staff, program partners, Afghan government stakeholders, beneficiaries	Degree to which stakeholders perceive that project activities have contributed to change
4. Sustainability: What can be expected to be the long-term result of the ASA intervention?		
Stakeholder perspectives of sustainability	Interviews with ASA staff, USDA staff, program partners, Afghan government stakeholders, beneficiaries	Degree to which stakeholder perspectives of project sustainability align

Pathways to sustainability	Interviews with ASA staff, USDA staff, program partners, Afghan government stakeholders, beneficiaries	Stakeholder perspectives of the pathways to sustainability Degree to which increased soybean production will lead to sustainability Degree to which critical agricultural inputs, in particular seeds, have been assured by project implementation strategy
Lessons learned to capitalize on opportunities for improving sustainability	Interviews with ASA staff, USDA staff, program partners, Afghan government stakeholders, beneficiaries	Stakeholder perspectives of lessons learned to capitalize on opportunities for improving sustainability
5. Replicability: What are the lessons learned from SARAI might help ASA be more successful in similar interventions in the future?		
Lessons learned that can be applied to potential fourth year of implementation and other projects	Document review Interviews with ASA staff, USDA staff, program partners, Afghan government stakeholders, beneficiaries Results of above assessments	Stakeholder perspectives of lessons learned to improve fourth year of implementation if approved, and other similar projects Results of above assessments
6. System and context of the SARAI project: What influences from other actors in the soy value chain have enabled or constrained program implementation/results?		
Actors and factors that are influencing beneficiary decisions on the ground	Interviews with ASA staff, USDA staff, program partners, Afghan government stakeholders, beneficiaries	Stakeholder perspectives of actors and factors that influence beneficiary decision making
Larger cultural and political factors	Interviews with ASA staff, USDA staff, program partners, Afghan government stakeholders, beneficiaries	Stakeholder perspectives of actors and factors that influence beneficiary decision making

Appendix 4. Detailed Methodology

Evaluation Design Process

EnCompass employed participatory techniques for the development of the evaluation design with ASA and USDA stakeholders, starting with a two-hour kickoff meeting with ASA staff on October 9, 2013.

Meeting Objectives Engage the ASA in a discussion to:

- Ensure that the evaluation is aligned with the needs/intentions/values of ASA
- Explore what a successful evaluation process looks like
- Explore key evaluation questions that this evaluation can answer for ASA

Agenda

- Welcome and introductions
- What a successful evaluation process looks like to ASA
- Maximizing use; focusing the evaluation
- Next steps and logistics
- Closing questions and thoughts

A similar discussion was held with USDA on October 23. 2013

Methodology

A team of three evaluators undertook fieldwork, one in the U.S. and two in Afghanistan. Data collection in the U.S. focused on in-person and telephone interviews with key actors, and review of background documents to understand project history, working relationships among partners, and M&E issues. The field team conducted data collection in Afghanistan over 17 days (October 26–November 11) in Takhar, Kunduz, Mazar and Kabul, visiting project sites, production sites, reconstruction sites, and markets, and interviewing management and staff of the partner agencies and others, government officers, farmers, and staff of non-government agencies. The field team looked most closely at implementation issues and measures of success.

USA Based Fieldwork

Exhibit 10, Exhibit 11, Exhibit 12, **Exhibit 13**, and **Exhibit 14** present qualitative data collection conducted.

Exhibit 10: Interviews completed with USA based stakeholders

Data Collection Participants	Data Collection Method	Date
Program Officer - WISHH	Phone interview	24 Oct
Project Manager - WISHH	Phone interview	24 Oct
External Consultant - WISHH	Phone interview	25 Oct
Executive Director - SFL	Phone interview	29 Oct

Data Collection Participants	Data Collection Method	Date
Director of Operations - WISHH	Phone interview	29 Oct
President and Program Officer - SALT	Group phone interview (interview took place over two calls) (N=2)	31 and 31 Oct
Program Analyst (and colleagues) – USDA/FAS, Food for Progress	In person group interview (N=3)	30 Oct
President and CEO - CBI	Group phone interview (N=2)	31 Oct
Executive Director - WISHH	Phone interview	1 Nov
Development and M&E Manager - WISHH	Phone interview	12 Nov

Fieldwork in Afghanistan

Kabul

Exhibit 11: Interviews completed with Kabul based stakeholders

Data Collection Participants	Data Collection Method	Date
USDA/FAS Minister Counselor and Senior Agricultural Advisor	Group interview (N=2)	28 Oct
Alternative Livelihoods Director – MAIL	Interview	29 Oct
Deputy Minister of Technical Affairs – MAIL, accompanied by Senior Advisor – MAIL, as well as SARAI outgoing Director and Deputy Director	Interview	29 Oct
Chairman of the Oil Crops Grower Association, and Rana Corporation	Interview	29 Oct
Executive Director and National Director – PARSA	Group interview (N=2)	30 Oct
Project Management Specialist, USAID Office of Agriculture	Interview	7 Nov
Founder and Country Director - NEI	Group interview (N=3)	8 Nov
Senior Advisor - Bureau of International Narcotics and Law Enforcement Affairs	Interview	8 Nov

Takhar

Exhibit 12: Interviews completed with Takhar based stakeholders

Data Collection Participants/ Focus	Data Collection Method	Date
Interview with an Agricultural Specialist and a staff member - SFL	Group interview (N=2)	31 Oct
Director of Technical Affairs, and a Rural Development and Rehabilitation expert from the Governor Office, Taloqan	Group interview (N=2)	2 Nov
Director of Economy, Taloqan	Interview	2 Nov
Director of Women Affairs, Taloqan	Interview	2 Nov
Director of Rural Rehabilitation and Development, Taloqan	Interview	2 Nov
Director of Taloqan River Basin Department	Interview	2 Nov
Staff member responsible for M&E - SFL	Interview	3 Nov
Regional Manager (NRM) and Regional Officer (NRM/Forestry)	Group interview (N=2)	3 Nov
Traveler on the road constructed under soybean project	Interview	3 Nov
District extension officer, Baharak	Interview	3 Nov
Regional Extension Management Advisor, USDA/FAS - IESC	Interview	3 Nov
Director of Agricultural Affairs, DAIL, Takhar	Interview	3 Nov
Senior officer, Microcredit - SFL	Interview	3 Nov
Regional Finance Manager	Interview	3 Nov
Warehouse officer	Interview	3 Nov
Infrastructure Manager - SFL	Interview	3 Nov

In addition to the interviews noted above, the following data collection activities were undertaken in Takhar:

- Field visit to grain market as well as a market walk (31 Oct)
- Field visit to SFL irrigation project and water intake (31 Oct)
- Field visit to a private oil pressing mill that extracts edible oil from flax seeds (31 Oct)
- Field visit to Baharak District to meet with farmers. Also visited soybean collection center (31 Oct)
- Conducted a transect walk on the irrigation and road project. Held discussions with soybean farmers (3 Nov)

Kunduz
(Note: the evaluator made a brief stop in Kunduz province en route to Mazar.)

Exhibit 13: Interviews completed with Kunduz-based stakeholders

Data Collection Participants/ Focus	Data Collection Method	Date
Staff, Kunduz Office - SFL	Interview	4 Nov
Director and Regional Extension Coordinator –DAIL, accompanied by VEGA/CBCMP/USDA/FAS	Group Interview (N=2)	4 Nov
Soybean factory supervisor - NEI/private sector joint venture soybean factory	Interview	4 Nov

Mazar

Exhibit 14: Interviews completed with Mazar-based stakeholders

Data Collection Participants/ Focus	Data Collection Method	Date
Acting Country Director for SALT and SFL Agronomist	Group interview (N=2)	31 Oct
USDA/FAS Senior Agricultural Advisors. Team Leader of IDEA-NEW (as well as several other staff members at Northern Lights who were present)	Group interview (N=3)	1 Nov
Acting Country Director - SALT, as well as SALT staff, and SFL Agronomist	Group interview (N=6)	1 Nov
Country Director - Joint Development Action	Interview	2 Nov
Director – Dail, Mazar	Interview	3 Nov
Soy Research Officer – DAIL/NEI	Interview	3 Nov
Director of Soy Marketing – Naseeb Group	Interview	3 Nov
Investment Team - Department of Defense, Task force for Business and Stabilization	Group interview (N=5)	3 Nov
New Country Director and Project Team Leader – ASA/WISHH	Group interview (N=2)	5 Nov
Senior Member – Naseeb Group	Interview	5 Nov

In addition to the interviews noted above, the following data collection activities were undertaken in Takhar:

- Walkthrough of AU Logistics Warehouse 2 (5 Nov)
- Walkthrough of Afghanistan Soy Factory (4 Nov)
- Field visit with soybean farmers in Nahri Shahi District (5 Nov)
- Field visit to three bakeries that have been supported by PARSA (5 Nov)

- Field visit to a poultry farm and Feed Dealers Association Office (3 Nov)

Document Review

The following documents were reviewed as part of this evaluation:

- Master Agreement and amendments
- ASA/WISHH reporting (including staff trip reports)
- Partner agreements and reporting
- Internal review conducted by ASA in mid-2012
- Monitoring and evaluation documentation from Shelter for Life (SFL)
- Soy production data from external stakeholders

Confidentiality

To protect confidentiality names of interviewees and group discussion participants are not included in this report, and all identifiable information has been removed from quotes where needed.

Using and Presenting Qualitative Data

Interview and group data collection capture perspectives of stakeholders in their own words, and is useful to inform program interventions in order to understand what key stakeholders think is going well, where they see challenges, what changes they perceive to be occurring as a result of the intervention, and how they view the intervention overall.

Qualitative data adds important context to help program stakeholders learn what needs to be continued or changed about the intervention, increasing chances that the intervention will contribute to desired results. Qualitative data can also add important context to any results emerging from an intervention. If a change is observed, is it due to the design of the intervention? The manner of implementation? Sound management? Or a combination of these (and other factors)? These questions can be answered by capturing others' perspective though qualitative data. From a program perspective, it is often as useful to understand the 'how' and 'why' questions as it is the binary question of whether a program has caused a result or not.

Interview and group data collection are often conducted using semi-structured data collection tools. Important topics and a general question outline are typically prepared in advance; however, the evaluator also has leeway to word the questions and decide on sequence based on the flow of the interview/group discussion. The evaluator is also free to pursue topics that emerge during the data collection and are deemed important. When analyzing qualitative data captured through semi-structured methods it is incumbent upon the data analysts to identify emerging patterns and themes from the data. Presenting findings using proportions or percentages of respondents is typically not useful if the data are derived from semi-structured or open ended methods. For example, if data are presented as follows: "24 of 80 respondents felt that the training content was relevant," the reader might wrongly interpret the finding to mean that the majority of respondents felt that the training content *was not* relevant. However, it could be the case that the majority of respondents were not asked a specific question on the relevance of training content during data collection. Alternatively, respondents might have provided such information spontaneously when answering a semi-structured question. Indeed, spontaneous responses to a semi-structured question are just as important, if not more important, than responses to structured questions, because the respondent is empowered to

answer a given question however they choose. Due to the flexible style of qualitative research, qualitative data analysis depends on the experience and integrity of the data analysts to present the data in a manner that is fair, accurate and useful.

Appendix 5. Sample Data Collection Instrument

This appendix provides information on the data collection instruments used for this evaluation.

Informed Consent

All stakeholders interviewed for this evaluation were administered a confidentiality and informed consent statement the language of which generally included the following language (tweaked given the specific stakeholder being interviewed):

INTRODUCE EVALUATION: Thank you very much for setting aside time to talk with us today. As you may know, EnCompass has been engaged by ASA to conduct a mid-term evaluation of the SARAI program in Afghanistan. In the evaluation we are looking at progress to date, and what can be learned from program experiences thus far. For this evaluation we are doing interviews with US stakeholders, as well as interviews/focus groups/observation in Kabul, Takhar, and Mazar.

EXPLAIN CONFIDENTIALITY AND INFORMED CONSENT: Before we begin this interview, I want to let you know that any information we discuss during this interview will not be connected to any specific person. If we use a quote from you, you will not be connected to that quote. Also, it is important for you to know that you are free not to respond to any of our questions or stop the interview at any time.

CONFIRM INTERVIEW TIMEFRAME: The interview will take about one hour.

ANY QUESTIONS? Before we begin, do you have any questions about this interview?

Data Collection Tools:

The evaluation team developed a standard set of data collection instruments that were then tailored to each stakeholder target. It should be noted that interviews were conducted in a semi structured format. As such, in some cases, the evaluation team was unable to ask all questions of the interviewee. Below, is a sample instrument that the team developed in the evaluation, and are representative of all instruments used. The team did not include the full set of tools in this report due to space considerations.

Background

1. **I would like to start with your history with the SARAI program. Please tell me a bit about your experience with the program thus far.**

Peak Story

This evaluation is designed to provide important information to ASA and others to improve the SARAI program. We know that there have been challenges, but also want to learn about the strengths of the program.

2. **Reflect on your experience with the SARAI program thus far, and its overall goal, and think of a peak experience, when you felt exceptionally energized about the program. Tell me about that**

time.

a. What helped make this experience happen?
b. What is needed in the short term and over the longer term to have more experiences like this?

3. **Generally speaking, what parts of the SARAI program do you feel have gone especially well?**
4. **Thinking about the program so far, what has been especially challenging?**
   a. What do you think led to these challenges?
   b. Going forward, how can the program overcome these challenges?

Design

5. **How would you assess how well the SARAI design has aligned with the goals and problems outlined in the Master Agreement?**

Implementation

6. **Thinking specifically about the implementation of the program thus far, what do you think has gone especially well?**

(probes – Road/irrigation systems rehabilitation, microcredit loans, soybean production support and training, marketing assistance, oilseed association, consumer awareness campaign, cooing seminars and support to bakeries, nutrition impact surveys, feeding trials, distribution of soy flour).

   a. What are the greatest challenges thus far?

7. **Let's focus on the production side of the program for a minute. I am thinking here about technical assistance and support to farmers.**
   a. What has gone especially well in this area?
   b. What challenges have you seen? What is needed to overcome these challenges?
8. **We would like your perspective about staffing patterns during the program**
   a. How would you assess appropriateness of staffing on the ASA side thus far?
   b. What about staffing among ASA partners?

   (Probe for turnover, oversight of partners, gaps in staffing)

9. **Let's talk about the financial management of the program. What do you think has gone especially well in terms of how the project has been managed financially?**
   a. What does better look like in the area of financial management?

Monitoring and Evaluation

We understand that the Master Agreement has set criteria to measure the progress of the program. The SARAI partner agreements also include various monitoring and evaluation responsibilities.

10. **How would you assess the monitoring and evaluation activities undertaken by the SARAI program thus far? What has gone well?**

a. What should the SARAI program do differently to be more effective in the area of monitoring and evaluation?

Results

We have talked quite a bit about implementation. Now I would like to get your thoughts on how you feel the SARAI program is contributing to change.

11. From where you sit, what program areas do you feel has had the greatest impact thus far? Why?

a. From where you sit, what program areas have been most disappointing in terms of impact? Why do you think the results have been disappointing thus far?

(Probes – Road/irrigation systems rehabilitation, microcredit loans, soybean production support and training, marketing assistance, oilseed association, consumer awareness campaign, cooing seminars and support to bakeries, nutrition impact surveys, feeding trials, distribution of soy flour).

Context

Of course, it is challenging to implement a program like SARAI in a complex and quickly adapting environment such as Afghanistan.

12. Thinking about Afghanistan's unique context, what external factors do you think are influencing program implementation/results?

a. What external factors are supporting the program
b. What external factors do you feel are constraining the program?

Sustainability

I know that a critical aspect of program success relates to sustainability – the extent that beneficiaries continue with activities related to the program, once the program is complete.

13. I would like to hear what you think sustainability looks like for this program. How would you define success in terms of program sustainability?

14. What do feel needs to be done to increase the chances of program sustainability?

a. How would you assess the SARAI program thus far in terms of capitalizing on opportunities for sustainability?

Conclusion

15. If you were granted ONE wish to improve the SARAI program going forward, what would it be?

16. Is there anything else that you want to tell me but didn't because I didn't ask the right question? Any other comments/insights/questions you would like to share?

Just before we finish the interview I would like to know what documents or resources you recommend that would be useful to the evaluation team as we continue our data collection.

Appendix 6. Output and outcome criteria to measure progress towards project objectives

Page 15 Outcomes for Road and Irrigation Rehabilitation

- Improve the productivity of the land by at least 100%
- Provide irrigation water for 5 communities
- Increase the purchasing power of 320 families by 400%
- Enhance agricultural trade by 50%
- Increase farmers' income by 50% by the end of the second harvest
- Increase farmers' income by an additional 5% beyond the third harvest

Page 16 Outcomes for Microcredit

- Increase income of the participants by an additional 25% by the second harvest
- Increase income of the participants by an additional 5%-10% beyond the second harvest

Page 16 Outcomes for Technical Support and Training

- Increase quantities of soy grown from approximately 500 acres to 4,500 acres
- Increase yields by 30 percent

Page 16 Outcomes for Marketing Assistance

- Increased knowledge of soy
- Increased demand for soy products
- 10 companies will utilize soy in their commercially available products

Page 17Outcomes for Establish Oilseeds Association

- Association established and registered, with strategic plan and membership structure in place
- Association offering services of value to members
- Association able to recover costs for services

Page 17Outcomes for Establish a Protein Processing Facility

- Protein processing facility is sustainable and profitable
- At least three products are developed and are being sold commercially

Page 17 Outcomes for Consumer Awareness Campaign

- Increased consumer awareness about the benefits of soy
- Increased soy consumption

Page 17Outcomes for Cooking seminars

- Increased knowledge of general nutrition
- Increased knowledge of the nutritional benefits of soy
- Increased soy consumption

Page 18Outcomes for Nutrition Impact Surveys

- Maintenance or improvement in nutritional impact indicators for targeted beneficiaries
- Improved utilization by targeted beneficiaries of the foods distributed
- Improved knowledge by targeted beneficiaries of the nutritional value of foods distributed

Page 18Outcomes for Distribute Soy Flour

- Increased knowledge of general nutrition
- Increased knowledge of the nutritional benefits of soy
- Increased soy consumption
- Nutritional status of targeted families is maintained or improved

Page 19 Outcomes for Barter 6,000 Metric Tons of Soybeans

- Improved quality of distributed food basket
- Increased availability of high quality protein source

Appendix 7. Table provided by ASA summarizing project achievements

ASA requested that the following table be included in the evaluation report. The table summarizes, what they feel are achievements during the project lifecycle. It is important to note that the evaluation team has not validated the data in this table, and, in some cases, does not feel that ASA is properly interpreting the high level outcomes and project goals as outlined in the Master Agreement.

Deliverable as per Master Agreement	Deliverable Completed
Rebuild and rehabilitate six irrigation systems	28 irrigation systems were completed. This greatly exceeded the goal of six systems.
Improve 35 km of tertiary access to market roads	51.47 km roads were completed. This exceeded the goal of 35 km of roads benefiting more than 70 communities.
Employ 320 unskilled laborers, each for a period of eleven months	292 unskilled workers were employed for a total of ten months
Provide 800 loans, at an average of $400 per loan	863 loans have been distributed at $400 per loan with a 99% repayment rate
Establish a protein processing facility	The processing facility has been procured, transported, commissioned, and staffed. Standard operating procedures and a production schedule are in place, with staff being continuously trained. The factory staff is being trained in HAACP procedures. The facility is commercially producing and selling soy flour, soybean meal, and crude soybean oil. Two by-products, hulls and foots, are also being sold in small quantities.
Provide technical support and training to 9,000 farmers	Over 13,000 farmers received training, and 9,040 farmers planted soybeans during the first three years of the program.

Establish and register one national oilseed association	The Oil Crops Growers Association of Afghanistan (OCGAA) registered and established.
Complete nutrition impact surveys	Survey protocols were drafted, completed, and used. Over 20 data collectors were trained, and surveys completed. In total, 1,037 complete data sets were gathered, and a final report shared.
Organize cooking seminars for 10,000 pregnant, lactating or vulnerable women	Cooking seminars were organized and completed for 10,000 women. Each attendee received 8.5 kgs. of soy flour following their participation in cooking seminars.
Support start-up 20 women owned community bakeries	20 women-owned naan bakeries were started.
Distribute winter soy flour family rations to 5,000 pregnant or lactating women	9,959 women received soy flour rations during two winter distributions (2011 and 2012).

ATTACHMENT III: SIGAR-14-51-SP INQUIRY LETTER: USDA SOYBEAN PROGRAM

SIGAR | Office of the Special Inspector General for Afghanistan Reconstruction

April 17, 2014

The Honorable Tom Vilsack
Secretary, U.S. Department of Agriculture

Dear Secretary Vilsack:

I am writing to alert you to potential problems with a United States Department of Agriculture (USDA) reconstruction program in Afghanistan. In 2010, USDA initiated the Soybeans for Agricultural Renewal in Afghanistan Initiative (SARAI), a program intended to promote soybean cultivation and consumption in Afghanistan. After a recent visit to the country, I am concerned that a key component of the initiative, a USDA-funded soybean processing facility, faces significant sustainability challenges due to a lack of raw materials for processing, ineffective technical assistance to Afghan farmers, and a lack of local demand for soybean products. Together, I believe that these challenges call into question the viability of the entire initiative.

Initial information obtained by SIGAR indicates that in September 2010, USDA awarded a cooperative agreement to the American Soybean Association's (ASA) World Initiative for Soy in Human Health (WISHH), and three partner organizations – Shelter for Life International, SALT International, and CBI Global – to carry out the SARAI program. USDA awarded the cooperative agreement through its Foreign Agricultural Service Food for Progress program. In 2010, ASA/WISHH estimated the total value of the program to be $26 million. ASA/WISHH materials state that the objective for the program is to establish and support key aspects of a viable soy-based industry in Afghanistan, including:

- processing and distribution of soybeans and soybean products,
- production of soybeans by Afghan farmers, and
- demand for soy products.

A key component of SARAI was the construction of a soybean processing facility just outside Mazar-i-Sharif by SALT International, in coordination with a local Afghan company. During my March 2014 trip to Afghanistan, I met with individuals responsible for implementing SARAI and managing the soybean processing facility, including employees of USDA, ASA, and SALT International. According to these program representatives, the sustainability of the soybean processing facility is in serious doubt because Afghan farmers are not cultivating soybeans in sufficient quantity to make it economically viable, nor is there any significant demand for soybean products in Afghanistan.

Apparently, USDA imported 4,000 metric tons of soybeans to jumpstart factory operations. SARAI partners believed that by the time the factory finished processing the imported soybeans local farmers would be producing enough to keep the factory operating at full capacity. However, this expectation has not been met. According to program representatives, only 10% of the USDA-supplied soybeans remain to be processed and local farmers will only produce 165 metric tons of soybeans this year, enough to keep the facility's milling equipment running for only one month. Therefore, it seems unlikely that the factory will meet its intended purpose of processing Afghan-grown soybeans on a full-time basis in the foreseeable future.

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After speaking with program representatives, I am also concerned that the technical assistance provided to Afghan farmers to enable them to grow soybeans may have been ineffective. Shelter for Life was the organization responsible for providing technical assistance to Afghan farmers for the first two years of SARAI. For reasons that are unclear, Shelter for Life chose to conduct much of its technical assistance in Kunduz and Takhar Provinces, as far as 200 kilometers from the Mazar-i-Sharif soybean processing facility. This reportedly increased the cost of transporting soybeans and made the program less appealing to Afghan farmers. In 2012, ASA took over the provision of technical assistance and shifted these activities to farmers in Balkh Province, closer to where the factory is located. However, program representatives told me that, by changing the location of technical assistance activities, ASA is starting over with a new group of farmers. This will delay the time when Afghans are able to produce quantities of soybeans that are sufficient to allow the processing facility to run at full capacity.

SARAI also appears to have encountered significant problems creating a market for soybean products in Afghanistan. This should have been expected since Afghans apparently have never grown or eaten soybeans before. According to program representatives, program planners overestimated the capacity of local Afghan partners to efficiently sell soybean product. The processing facility is able to produce soybean meal for animal feed, soy flour for human consumption, and soybean oil. To remain economically viable, the factory has to sell the more profitable soy flour, as opposed to the less profitable animal feed.

However, program representatives state that Afghans don't like the taste of bread made with soybean flour. In order to create a marketable product, the processing facility has to mix soybean flour with wheat flour.[1] An individual familiar with the program stated that farmers are reluctant to grow crops that do not have a proven market and that it typically takes five to ten years to establish a new crop in a country that previously did not have a market for it. Furthermore, technical assistance programs for soy production, including financial incentives, will end later this year. Given the decreased incentives and limited demand, it may be even more difficult to convince Afghan farmers to cultivate soybeans in amounts sufficient to support running the processing facility at full capacity.

Due to the questions surrounding the effectiveness and sustainability of SARAI, I would appreciate it if your Department would provide my office with a justification and project description of the SARAI program, the program's current status, any identified challenges to the success of the program, and your Department's plan to mitigate those challenges. Likewise, please provide my staff with all contracts, program evaluations, and other materials related to the planning and implementation of this project, as well as a detailed breakdown of all funds expended to date.

[1] The soybean processing facility currently sells bags containing a mix of 5% soybean flour and 95% wheat flour, according to program representatives. Inexplicably, it appears that the factory does not even use Afghan flour but rather imports its flour from Kazakhstan.

I am submitting this request pursuant to my authority under Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended. Please direct your staff to provide the information requested no later than May 1, 2014 to my Director of Special Projects, Mr. Jack Mitchell, at 703-545-5964 or at john.h.mitchell161.civ@mail.mil. Please do not hesitate to contact him if you have any questions.

Sincerely,

John F. Sopko
Special Inspector General
for Afghanistan Reconstruction