

**VALUE CHAIN PROGRAM DESIGN IN**

**THE MONGOLIAN VEGETABLE**

**VALUE CHAIN**

July 2014

Report written by Action for Enterprise

[chflogospace](http://www.chfinternational.org/)

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# Executive Summary

In Mongolia, USAID’s EMIRGE program has begun a market-development initiative to promote sustainable impact with farmers and agricultural cooperatives. To support those efforts, Action for Enterprise (AFE) was contracted from April to July 2014 to lead a program design exercise in the vegetable value chain, and to build the capacity of EMIRGE’s team to conduct value chain development activities. This report presents the results of the program design exercise for the vegetable value chain.

***Selection Exercise*** – AFE guided the EMIRGE team in selecting sub-products within the vegetable value chain with strong growth potential and participation of large numbers of farmers. A series of vegetable species were considered including the so-called “common vegetables” (potato, cabbage, carrot, and turnip) as well as more than 20 different “uncommon vegetables” (onion, beet root, cucumber, tomato, and leafy vegetables). Given the relatively small number of farmers producing any one vegetable species, and the similar constraints facing farmers cultivating all of the vegetables, it was ultimately decided to focus on the more general “vegetable value chain.”

***Orientation -*** AFE conducted a half-day refresher workshop in preparation for the program design exercise for the EMIRGE team. This workshop refreshed the EMIRGE team with the tools and methodologies that combine the strengths of value chain analysis with methods for identifying commercially viable, market-based solutions that promote industry competitiveness and benefits for farmers. The remainder of the day was spent organizing appointments and other logistical arrangements for the value chain analysis.

***Value Chain Analysis* -** From June 10 to 20 the team conducted over forty interviews with vegetable market actors and key informants in order to complete a value chain map, assess the end market, understand inter-firm relations and governance structures, and identify constraints in the vegetable value chain.

***Identification, Prioritization and Assessment of Market-Based Solutions* –** The team then identified potential market-based solutions (MBSs) that could address identified constraints and prioritized these MBSs according to their ability to improve the competitiveness of the targeted value chains and benefit the largest number of small-scale vegetable farmers (also referred to in this report as micro, small, and medium scale enterprises or MSMEs). The shortlisted MBSs were then assessed through additional interviews and focus groups with MBS providers (also referred to as “Lead Firms”) to identify challenges, incentives, and initiatives for developing the targeted MBSs.

***Identification of Illustrative Program Facilitation Activities*** – The team then identified “facilitation activities” that it could undertake to support the implementation of initiatives proposed by the MBS Providers. These activities are summarized in the following table.

|  |  |
| --- | --- |
| **Market-Based Solution 1** | **Targeted Providers (Lead Firms)** |
| Provision of information/training on modern cultivation techniques to increase yields for vegetable farmers including:   * appropriate chemicals and proper usage * differences between seed varieties and brands | Input Supply Companies and Processing Companies (on a more limited scale) |
| **Illustrative Lead Firm Initiatives** (that could be facilitated with EMIRGE technical and cost share support) | |
| *Initiatives proposed by (and to be implemented by) Input Supply and Processing companies included:*  Increase distribution of existing informational materials (such as those prepared by the National Agricultural Extension Center) relevant to the products that the companies are marketing to farmers; Create and distribute new informational and promotional materials (booklets, pamphlets, posters, etc.) with product specific information/advice for farmers; organize demonstrations and field days to promote new varieties/techniques; collaborate with the Plant Science and Agricultural Research Training Institute to provide training for vegetable farmers on improved varieties and modern cultivation techniques; establish relationships with local retailers and/or expert farmers to act as commissioned agents, and build their staffs’ capacity to provide technical support to vegetable farmers. | |

|  |  |
| --- | --- |
| **Market-Based Solution 2** | **Targeted Providers (Lead Firms)** |
| Access to quality inputs for vegetable farmers including:   * a consistent supply of quality seed varieties * appropriate chemicals for crop production | Input Supply Companies and Processing Companies (on a more limited scale) |
| **Illustrative Lead Firm Initiatives** (that could be facilitated with EMIRGE technical and cost share support) | |
| *Initiatives proposed by (and to be implemented by) Input Supply and Processing companies included:*  Exposure visits in Mongolia or other countries to identify new sources of agricultural inputs (including seed); Improve capacity of staff to identify quality seed which can be produced in Mongolian conditions; Work with the Plant Science and Agricultural Research Training Institute, the Seed Testing Commission, and the Research Institute for Plant Protection to secure approval of new varieties of seed for multiplication in Mongolia and/or new varieties of seed and chemicals for import and sale in Mongolia; Organize and provide training to seed multipliers to multiply new varieties of seed in Mongolia; Organize demonstrations and field days to promote new varieties/techniques; Establish relationships with local retailers and/or expert farmers to act as agents, and build their capacity to market inputs directly to vegetable farmers. | |

|  |  |
| --- | --- |
| **Market-Based Solution 3** | **Targeted Providers (Lead Firms)** |
| Access to small-scale vegetable storage equipment for farmers | Storage equipment companies |
| **Illustrative Lead Firm Initiatives** (that could be facilitated with EMIRGE technical and cost share support) | |
| *Initiatives proposed by (and to be implemented by) Storage equipment companies included:*  Conduct exposure visits in other countries to identify modern small-scale storage equipment for vegetables; Work with financial institutions to develop financing options for farmers; Provide information to farmers about small-scale storage equipment for vegetables; carry out promotional and marketing activities for new equipment with farmers. | |

**Next Steps –** AFE presented EMIRGE with a draft “Invitation for Application” (IFA) format through which targeted MBS providers/LFs can propose initiatives (that they will implement) that EMIRGE might support with technical/financial assistance. These initiatives would result in improved products, services, market access and support for vegetable farmers. Once activities are identified and agreed upon, EMIRGE can develop Memorandums of Understanding (MOUs) and technical and cost share agreements with the LFs and support them in implementation. These tools and methods were discussed during the “Next Steps” session at the end of the consultancy.

Given the short growing season in Mongolia and the interest expressed by input supply companies in interviews and focus group discussion, AFE recommends that EMIRGE focus its initial efforts on supporting input supply companies interested in conducting field-based activities for producers (field days, trainings, etc.) in August and September before the end of the growing period. This will allow EMIRGE to gain experience facilitating LF interventions and will set the stage for further collaboration with these companies while demonstrating concrete results to USAID. Other longer-term initiatives with input supply and storage equipment companies (developing promotional materials, business planning exercises, etc.) can be discussed, planned, and implemented in preparation for the 2015 growing season.

# Introduction

In Mongolia, USAID’s EMIRGE program has begun a market-development initiative to promote sustainable impact with farmers and agricultural cooperatives. To support those efforts, Action for Enterprise (AFE) was contracted from April to July 2014 to lead a program design exercise and to build the capacity of EMIRGE’s team to conduct value chain development activities. The “vegetable value chain” had been predetermined by EMIRGE to be a priority and the focus of the program design exercise.

An AFE consultant worked with the EMIRGE team to conduct the following activities:

* A selection exercise to identify high priority vegetable species to focus on
* A value chain program design orientation and planning session
* An analysis of the vegetable value chain
* An assessment of prioritized market-based solutions that address identified value chain constraints
* Validation of incentives and challenges to market-based solutions
* Identification of potential project facilitation activities
* A “next steps” presentation to the EMIRGE team

This report will describe each of these activities.

# Selection of Vegetable Species

AFE led a process of identifying specific vegetable species within the broader vegetable value chain to be the focus of in-depth analysis and program design. The process began by identifying an initial list of these species. This was followed by interviews with key informants, and a review of secondary information.

**Initial List of Vegetable Species –** An initial list of vegetable species was developed for consideration based on ground experience and desk research. These included:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| * cabbage | * cucumber | * tomato | * onion | * garlic |
| * pepper | * broccoli | * cauliflower | * lettuce | * spinach |
| * Chinese chives | * eggplant | * green onion | * cumin | * parsley |
| * red beet | * bok choy | * peas | * green bean | * turnip |
| * carrot | * squash | * potato |  |  |

**Interviews with Key Informants –** The EMIRGE team then interviewed key informants familiar with each of the vegetable species. Those key informants included representatives from the vegetable input supply companies, processing companies, and vegetable-growing cooperatives.

**Final Selection –** Based on the industry knowledge gained from the key informants and market actors, and further discussions between AFE and the EMIRGE team, it was determined that many market actors are involved with many different vegetable species and the constraints affected all of the species. Due to these factors AFE and EMIRGE decided that rather than focus on one particular vegetable species end market, it would be best to target the overall vegetable value chain.

# Value Chain Program Design Orientation

AFE conducted a half day orientation refresher session in preparation for the program design exercise for the EMIRGE team, who had recently participated in a similar program design exercise with AFE in the dairy value chain. The orientation refreshed the team members’ knowledge on the tools and methodologies that would be used for each step in the program design process, and exposed the team to specific tools adapted for the analysis of the vegetable value chain. The remainder of the day was spent organizing appointments and other logistical arrangements for the value chain analysis.

# 4. Value Chain Analysis and Identification of Market-Based Solutions

This section presents the results of the analysis of the vegetable value chain. It begins with a characterization of the end-market for vegetables and then describes the functions, activities, and interrelationships of the various market actors, which are laid out in a value chain map. Given the importance of input supply markets in the vegetable value chain, a separate input supply value chain map was developed in addition to one focused on the end market. The section concludes with a discussion of the constraints that the market actors face, and the market-based solutions that can address those constraints.

## 4.1 Assessment of the End Market for Vegetables

The Mongolians interviewed differentiate between two distinct categories of vegetables: “common vegetables” and “uncommon vegetables.” Common vegetables are those vegetables that have traditionally been the most commonly grown and consumed in Mongolia. These common vegetables are available in Mongolia throughout the year and include: potato, cabbage, carrot, and turnip; however in the early spring supply of common vegetables is limited and prices are high. All other vegetables consumed in Mongolia were considered by respondents to be uncommon vegetables. The most important of these uncommon vegetables were reported to be onion (dry), beet root, cucumber, tomato, and leafy vegetables (particularly spinach, lettuce, and bok choy). Due primarily to a shorter shelf-life, most uncommon vegetables produced in Mongolia are available only seasonally from June through September. The rest of the year, uncommon vegetables are imported from China. Most vegetables produced in Mongolia are sold for fresh consumption; however a small percentage of uncommon vegetables, primarily cucumbers, are processed into pickled products.

***Market Demand*** – The market for vegetables in Mongolia is relatively small, primarily because vegetables make up a relatively small part of the Mongolian diet. The average daily serving of fruits and vegetables in Mongolia is 1.8, or only 36% of the World Health Organization (WHO) recommendation per day. In fact, 92.3% of the population consumed fewer than the five servings of fruits and vegetables daily recommended by the WHO[[1]](#footnote-1). However, according to the Food and Agriculture Organization of the United Nations (FAO), demand for vegetables (as estimated by the amount of vegetables produced in and imported into Mongolia) is increasing from this low base, as shown in Figure 1 below.

Figure 1: Year-on-Year Change in Demand for Vegetables

Source: FAOSTAT 2013 Mongolia Crop Production Quantity and Import Quantity data for the period 2007-2012

These figures are supported by anecdotal evidence reported to the Team by a sales manager at a major supermarket chain. According to this source the overall demand for common vegetables has been stable or increasing at a low rate over recent years; however, there are seasonal variations with consumption peaking in the fall and decreasing in the spring[[2]](#footnote-2). These seasonal variations are due primarily to price and availability of quality common vegetables during the offseason. The uncommon vegetables do not have the same type of seasonal variation in demand; however, as mentioned above, locally sourced uncommon vegetables are widely available only from June through September. The remainder of the year demand is met through Chinese imports. According to this same source, demand for uncommon vegetables has been rapidly increasing in recent years. The same supermarket sales manager expects at least a 50% year-on-year increase in sales of uncommon vegetables in the years 2013-2014, and believes that this trend will continue at least in the medium term.

***Trends and Competitiveness*** – As mentioned above, Mongolia has a relatively short growing period due primarily to climatic conditions. This results in fresh Mongolian-produced vegetables only being available for a few months between June and September. At other times of the year, most vegetables are imported from China. A few entrepreneurs, with support from the Government of Mongolia, have built winter greenhouses to produce uncommon vegetables throughout the year, and some of these entrepreneurs rent space in these winter greenhouses to other farmers; however, according to many market actors interviewed the high cost of building and/or renting winter greenhouses make it difficult to compete with much lower cost Chinese imports.

Figure 2: Sign advertising Mongolian bok choy

In fact low cost vegetables from China are imported throughout the year. Many Mongolian consumers, however, prefer Mongolian vegetables because they perceive the locally sourced vegetables to be of higher quality with less chemical contamination than imported Chinese vegetables. These consumers are willing to pay a premium for these vegetables, and retailers prominently advertise the fact that they are produced in Mongolia (see Figure 2).

A number of external economic factors are affecting the competitiveness of Mongolian vegetables including depreciation of the Mongolian Tughrik (MNT) and high inflation. The MNT has depreciated over the last few years against the Chinese Yuan Renminbi (CNY) (the currency in which most imports are purchased), as well as against other currencies[[3]](#footnote-3). The MNT has fallen by over 25% against the CNY in the last 12 months alone, and the rate of depreciation has been further escalating in recent months (see Figure 3). This inflation has increased the price of imported Chinese vegetables when sold to Mongolian consumers in MNT; however, because many inputs for Mongolian farmers are also imported, and thus now cost more for the same reason, it is unclear how currency depreciation affects the competitiveness of Mongolian-produced vegetables.

Figure 3: MNT per 1 CNY

Figure 4: Year-on-Year Change in the Consumer Price Index

Source: Bank of Mongolia

The depreciation of the MNT and a growing money supply (a result of loose monetary policy) has been driving an increase in the rate of inflation, particularly in recent months. The Government of Mongolia instituted a “Price Stabilization Program” in November 2012 to combat supply-side inflationary pressure. Through this program the central bank provides loans at subsidized interest rates through the commercial banks to specified industries, this may also be intensifying demand-side inflationary pressure. Despite this program, or perhaps as a result of it, the rate of inflation has been increasing in recent months reaching a rate of 13.7% on year-on-year basis in May (see Figure 4)[[4]](#footnote-4).

Consumers have reduced purchasing power as a result of higher inflation, and as a result may consume less of all vegetables. In fact one wholesaler interviewed by the Team supported this finding when she reported a decline in wholesale sales of vegetables,[[5]](#footnote-5) from representing 70% of her sales prior to 2012 to only 30% today. She attributed it to the “economic crisis” underway since 2012 in which the depreciation of the MNT and high inflation play an important role[[6]](#footnote-6).

## 4.2 Value Chain Market Actors

During the analysis of the vegetable value chain more than 40 interviews were conducted with market actors and key informants. The primary actors in the vegetable value chain include the following:

* Government Agencies (Ministry of Industry and Agriculture, Ministry of Education and Science, National Agricultural Extension Center, and Plant Science and Agriculture Research and Training Institute, Professional Inspection Agency)
* Vegetable retailers (including larger supermarkets and small-scale retailers)
* Vegetable processors
* Traders
* Wholesalers
* Farmers (small, medium, and large)
* Input suppliers (formal and informal suppliers of seed, chemicals, and farm equipment)
* Service providers (banks, leasing companies, and laborers)

Two value chain maps (one focused on input supply and one focused on the vegetable end market) were developed showing the linkages between different market actors. Following each map, further information is given about each of the major actors playing a role in that value chain. Many actors in the vegetable value chain map play multiple roles. To avoid repetition actors are described only in the section related to their primary function.

Figure 5: Vegetable Input Supply Value Chain Map



### 4.2.2 *Primary Function*: Input Supply

A range of market actors play an important role in providing agricultural inputs to Mongolian farmers through a complicated web of relationships.

**Mongolian Farmers’ Association for Rural Development**

The Mongolian Farmers’ Association for Rural Development (MFARD) is a registered non-governmental organization (NGO). Members of MFARD include farmers, official private seed multipliers, and formal and informal input suppliers. With support from the Swiss Agency for Development and Cooperation (SDC), MFARD has been implementing the Mongolia Potato Project (MPP) since 2004. Through implementation of the MPP over the last 10 years MFARD has become directly engaged in many functions in the value chain, particularly with regards to potatoes including: 1) direct importation of Elite seed from the Netherlands; 2) distribution to official and unofficial seed multipliers; 3) purchase of multiplied seed; 4) sale of seed to retailers and farmers throughout the country at “wholesale” prices which do not include the costs of intermediation (including transportation). The Team even witnessed the sale of potatoes supplied by the MPP to retailers in Ulaanbaatar at a price 700 MNT/kg – significantly lower than th e wholesale price of 1,100 MNT/kg at the Bars Market. These “MPP Potatoes” were ostensibly sourced from farmers. Since 2012 the MPP expanded its focus to cabbage and onion, and is taking on many of the same functions related to the production and distribution of seed for these crops. MFARD recently formed a private seed company, Elite Seed, under the MPP; however there seems to be considerable overlap between the activities and revenues of Elite Seed, MFARD, and the MPP. The MPP is scheduled to end in 2015, and it is unclear if MFARD (and Elite Seed) will be able to continue playing all of these functions on a commercial basis without additional donor support.

**Official Private Vegetable Seed Multipliers**

There are approximately 40-50 licensed seed multipliers located in three provinces in Mongolia (Uvs, Bayankhongor, and Darkhan). Each of these provinces focus on different types of seed (Uvs – carrot, turnip, beet, onion, and potato; Bayankhongor – cucumber and tomato; and Darkhan – cabbage, onion, turnip, and potato). Many of these official multipliers used to be employees of the Regional Plant Science and Agricultural Research and Institutes (PSARTI) located in the provinces during the socialist period (1970s-80s). In the 1990s PSARTI budgets were cut, and many of these former employees began to multiply seed commercially. Licensed seed multipliers only multiply the open pollinated varieties which have been approved for release, of which there are 14 (one official released variety per species of vegetable). The multipliers may receive imported “Super Elite” seed, particularly for potato, from MFARD, but for the most part they focus on multiplying retained seed from the previous year. In addition to retaining seed for multiplication in the next year, they sell a small portion of seed directly to farmers in their immediate area; however, most of the seed they produce is purchased by MFARD, which then distributes this seed to its members (farmers and retailers) at the same price it purchased it for (ostensibly using MPP funding to pay for transportation, staff, and their costs related to intermediation). The multipliers used to also sell directly to retailers in other districts, but these retailers now prefer to purchase from MFARD because they can get the seed delivered to them at the same price that they could buy it at the multipliers’ farm gate.

**Regional Plant Science and Agricultural Research and Training Institutes**

Three Regional PSARTIs (located in Uvs, Bayankhongor, and Darkhan Provinces) have the legal mandate to produce all seed in Mongolia; however, as PSARTI budgets have declined since the 1990s they no longer have the resources to multiply seed on a large scale. They do multiply a small amount of seed (Uvs – carrot, turnip, beet, onion, and potato; Bayankhongor – cucumber and tomato; and Darkhan – cabbage, onion, turnip, and potato), which they primarily sell to MFARD. In addition to seed multiplication, PSARTI is also responsible for conducting agricultural research including variety breeding and testing, and training programs for local officials.

**Informal Seed and Agricultural Input Retailers**

There are many informal importers of agricultural inputs, primarily importing seed, herbicides, and pesticides. These informal importers travel to various cities primarily in China (Russia is also a source for certain inputs, particularly seed onion), and purchase relatively small amounts of seed or chemicals from Chinese retailers. Some informal importers may hire translators to help communicate, while others rely primarily on non-verbal communication with retailers and pictures on the packaging. Because of the small amount of product that they are purchasing, usually less than $5,000 USD, they are unable to enter into long-term relationships with suppliers. They therefore cannot ensure the availability of particular products in the market at any given time. These inputs are then smuggled into the country either directly in the luggage of the informal importers or hidden in shipments of other products. As this practice is illegal, the importers run the risk of having their products confiscated by customs inspectors at the border. Most informal importers interviewed reported that because they are doing it at such a small scale it is not worth developing an understanding of import regulations, getting government approval for import, and formally importing inputs. Many of these importers may test new seed varieties informally in their own fields (most informal importers are also farmers). Very few of these informal importers have their own retail store. Instead, most either sell to neighbors and friends from their house or in local vegetable markets.

An informal input retailer in Darkhan market

**Formal Seed Importers / Retailers in Ulaanbaatar**

There are relatively few formal licensed importers of seed and equipment, only 5-10, all located in Ulaanbaatar. The size of these companies ranges from relatively small seed importers and retailers with less than $50,000 of annual revenue to larger importers of equipment (tractors, greenhouses, etc.) which also import and sell seed (although seed makes up a relatively small amount of their business). The smaller companies often operate in a similar manner to the informal importers, relying on retail and wholesale markets in China and Russia. These smaller companies are often also members of MFARD and therefore purchase and sell OP seed supplied by MFARD. In contrast, some of the larger companies sometimes have direct relationships with international seed companies, such as the Korean company Asia Seed Co. Ltd. Regardless of the size of the company, all of the formal seed importers / retailers each only have a single retail outlet located in Ulaanbaatar, and no company was currently found to have a formal distribution network for their products in other Provinces (although one larger company mentioned that they had tried to have local agents in the past, but faced problems with repayment of credit advanced to the local agents and so stopped that practice).

**Formal Agricultural Chemical Importers**

There are 10-15 importers of agricultural chemicals, primarily pesticides, herbicides, and fertilizers. These companies are importing primarily from Russia and China. The primary market (approximately 90% of sales) is farmers growing field crops, namely wheat. The primary reason is that vegetable farmers tend to be smaller, and the packaging for the chemicals tends to be too large for them. Vegetable farmers also lack knowledge of the need for chemicals and how to use them effectively and also may have problems accessing finance to purchase chemicals.

**Small and Medium Size Vegetable Farmers**

Most farmers use retained seed for at least some of the species that they cultivate (prominent exceptions seem to be cabbage, cucumber, tomato, bell peppers, and some other “uncommon” vegetables). These farmers may give or sell seed to friends or neighbors, but not in great quantities. Some farmers also import seed and chemicals for their own use or for sale in small quantities to their friends and neighbors.

**Pickling Companies**

In an effort to ensure availability of appropriate cucumber varieties for pickling, many companies, particularly the larger ones, import cucumber seed. This importation is done informally and seeds are typically not declared at the border. There is a large demand for this seed by farmers, as evidenced by the fact that some farmers who receive seed on credit from the pickling companies for 250,000 MNT/kg reportedly on-sell some the same seed to other farmers for as much as 400,000 MNT/kg (this practice is not condoned by the pickling companies).

Figure 6: Vegetable Value Chain Map



### 4.2.2 *Primary Function*: Production

Many different actors are engaged in production of vegetables; however, there are two distinct actors that are focused primarily on production.

**Small and Medium Size Vegetable Farmers**

Most vegetable farmers in Mongolia are relatively small cultivating between one and 20 Ha of land, on which they grow a range of different vegetables (usually between three and five different species). Although their primary function in the value chain is production of vegetables, many of these farmers are also playing a variety of other roles, including input supply as mentioned earlier. The vast majority of farmers sell their production to traders who purchase the products at the farm gate. Many vegetable retailers in provincial and local markets are also farmers selling primarily their own production, and some farmers retail directly in “farmers’ markets” established by the city government of Ulaanbaatar. Additionally, some farmers pickle a portion of their product for household consumption and/or sale in local markets.

Farmer in Zuunkharaa

**Vegetable Production Companies**

A number of companies have been established in the last few years which specialize in vegetable production. These companies produce on a relatively large amount of land, usually more than 25 Ha, and have made significant investments in infrastructure including greenhouses and irrigation systems for this land. A handful of companies established winter greenhouses in the past few years to enable them to produce and supply fresh Mongolian vegetables to the market throughout the year. Some companies also package their vegetables using plastic wrap or bags. Vegetable production companies sell primarily to larger buyers including supermarkets, restaurants, and wholesalers; however, some companies also sell to traders and retailers in Ulaanbaatar.

### 4.2.3 *Primary Function*: Trade/Wholesale

Bulking services are provided by a number of different actors, commonly referred to as “middlemen” in Mongolian. However, to differentiate between smaller scale actors and the large formal actors in the Bars wholesale market (the only major wholesale market in Mongolia), the Team categorized middlemen by smaller scale vegetable traders and larger vegetable wholesalers. It is important to note that a large percentage of traders and wholesalers are also engaged in production of vegetables themselves in addition to providing bulking services to farmers.

**Vegetable Traders**

Most vegetable traders in Mongolia are also medium scale producers who purchase from between a few dozen and a few hundred other vegetable farmers, often friends and neighbors living in the same areas. Small producers often get paid in cash on the spot, while larger producers, or those that have closer relationships with the traders, will often sell on credit and be paid in one or two days. Traders usually use their own trucks to transport “common” vegetables primarily to markets in Ulaanbaatar. “Uncommon” vegetables produced and sold in much smaller quantities are shipped by train to Ulaanbaatar in “packets” of approximately 200 g at a cost of 35 MNT/kg. Many traders first try to sell to wholesalers in the Bars wholesale market in Ulaanbaatar; however, at times, particularly during the peak production period from July-Sept, it can be difficult for traders to sell all of their products to wholesalers. Traditionally traders would try to sell the remainder of their products to buyers (usually retailers) just outside of the market, but recently the police have been enforcing a ban on sales in the area outside of the market. Some traders have developed direct relationships with retailers in Ulaanbaatar and traders from other provinces to sell products, but many still prefer selling in larger quantities to Bars wholesalers when possible.

**Vegetable Wholesalers in Bars Market**

There is only one large wholesale market for vegetables in Mongolia. The Bars market, as it is known, contains a range of small retail shops selling a range of food and consumer goods in addition to wholesalers. Most of the vegetable wholesalers in the Bars market are also large vegetable farmers and/or importers of vegetables (primarily from China), and these two sources of vegetables (own production and import) make up the bulk of the products sold by the wholesalers. Wholesalers also purchase Mongolian vegetables from traders and occasionally from farmers. The private company managing the Bars market also provides laboratory testing services for chemical residue levels on vegetables to wholesalers and retailers operating in the market for a fee. The wholesalers sell vegetables to retailers, hotels, restaurants, and supermarkets in Ulaanbaatar as well as to retailers and traders from other provinces who visit the market. A number of the wholesalers also sell small quantities of vegetables directly to retail customers at Bars.

Delivering cabbage to the Bars market

### 4.2.4 *Primary Function*: Processing

Many farmers are engaged in processing of their vegetables through household-level pickling operations. However, only a few companies are focused primarily on vegetable processing.

**Pickling Companies**

There are between 5-10 formal vegetable processing companies in Mongolia, all of which are engaged in pickling of vegetables. The four largest pickling companies are Bagro, Mish Mash, Gazar Shim, and Durvun-Ulzii, each of which follows different strategies to source the vegetables that they process. For instance Mish Mash currently focuses primarily on producing vegetables on their own farm, and supplementing this production with cucumbers sourced from farmers and traders on the open market. On the other hand, Bagro supplies cucumber seed on credit for 250,000 MNT/kg to a limited number of farmers to ensure a sufficient supply of cucumbers that meet their requirements. Despite the varied strategies, all of the companies reportedly face difficulty in sourcing a sufficient quantity of vegetables, particularly cucumbers, which meet their quality requirements. This is due in large part due to a lack of sufficient quantity of seed for cucumber varieties appropriate for pickling (particularly in terms of the size of the vegetable). As a result most of the pickling companies, particularly the larger ones, import cucumber seed, as discussed above. Pickling companies sell their products via retailers in Ulaanbaatar and other provinces as well as supermarkets.

### 4.2.5 *Primary Function*: Retail

There are many different retail outlets in Mongolia.

**Chain Supermarkets**

There are a number of chain supermarkets, primarily serving the upper-end of the Ulaanbaatar market. These supermarkets typically purchase directly from larger vegetable production companies and/or Bars wholesalers. A few of the larger supermarkets also directly import vegetables from China.

**Restaurants / Hotels**

There are numerous restaurants and hotels in Ulaanbaatar that purchase vegetables on a daily basis. Larger chain restaurants and hotels typically purchase from vegetable production companies, while smaller eateries purchase directly from traders and/or wholesalers.

**Small Independent Vegetable Retailers in Ulaanbaatar**

Most vegetables sold to consumers in Ulaanbaatar are sold by small independent retailers. These small retailers typically purchase a small stall in a larger market. A handful of these larger markets, including the Bars Market also have storage available for rent to retailers and wholesalers.

**Local and Provincial Retailers**

These small-scale retailers are located in markets outside of Ulaanbaatar. Many, but not all, of these retailers are also farmers who sell their own products in addition to other farmers’ products. These retailers purchase directly from neighboring farmers, Bars wholesalers, and/or traders.

### 4.2.6 Government Agencies

Government of Mongolia agencies play several roles in the vegetable value chain. Government policies and activities have shaped the status of the vegetable and input supply markets, and new policies and laws have been introduced in recent years which may greatly affect the vegetable market system.

**Seed Testing Commission**

The Seed Testing Commission (STC) is the government body responsible for approving new seed varieties for release in Mongolia. The STC includes a range of members from the public and private sectors, and is chaired by the Director General of the Department of Coordination for Crop Production Policy Implementation of the Ministry of Industry and Agriculture. There is some confusion among members about whether STC approval is necessary for imported seed or only for seed to be produced locally, because the Seed and Variety Law which dates from 1996 focuses on local multiplication of open pollinated varieties, and does not explicitly take into account importation of modern varieties, particularly hybrid varieties. To officially import seed, permission from the Ministry of Agriculture is required; however the process for obtaining this permission is not clearly defined and different processes were described by different market actors importing seed.

**Plant Science and Agriculture Research and Training Institute**

The Plant Science and Agriculture Research and Training Institute (PSARTI), under the Ministry of Education and Science, plays several roles in the agricultural sector. One of the primary roles of PSARTI is breeding and testing new varieties of seed through multi-locational trials in test fields at research centers throughout the country. Results of these tests are shared with the STC which makes the decision about whether or not to release the new varieties. Private companies can ask PSARTI to test their varieties and make a recommendation to the STC; however, the only reported organization that has done this is MFARD. Officially PSARTI is also responsible for multiplying all seed for sale in the country, which is a role it played during the Socialist period prior to the 1990s. Today, however, PSARTI lacks the resources to multiply sufficient quantities of seed to meet market demand. Additionally, PSARTI is responsible for training government officials in cultivation techniques.

**Research Institute for Plant Protection**

The Research Institute for Plant Protection (RIPP) plays a similar role to PSARTI, except that they focus on testing plant protection products, particularly agricultural chemicals including pesticides, herbicides, and fertilizers. Annually the RIPP issues a list of chemicals approved for import, and only those chemicals on the list are allowed to be imported.

**Professional Inspection Agency**

The Professional Inspection Agency (PIA) plays an important role in the vegetable market system by supporting the enforcement of policies and laws. The PIA is responsible for testing inputs at the border to ensure that chemicals are on the list of approved chemicals and that seed is of acceptable quality. Additionally, the PIA is now responsible for ensuring enforcement of the new Food Security Law which went into effect in January 2014. This new law requires among other things that farmers practice “good agricultural practices” (GAP) despite a lack of understanding among all market actors about GAP. Additionally this new law includes requirement that all food be “traceable” throughout the entire value chain back to the farmer; however, how this traceability requirement will be implemented is not yet clear. The PIA is also in the process of creating a phyto-sanitary certificate to check for quality and chemical residue of products in retail markets. In addition to its enforcement mandate, the PIA also provides trainings to a range of market actors. In Ulaanbaatar they plan to train processors in the near future, but currently have no plan to train wholesalers or trainers. Supposedly they also provide training to farmers at the provincial level, but no farmer interviewed reported attending or even hearing about trainings organized by the PIA.

**National Agriculture Extension Center**

The National Agriculture Extension Center is the government agency responsible for providing extension services to farmers; however, they lack the resources to carry out many trainings and other extension activities with farmers. The primary focus of the NAEC is on livestock, but they do also have some activities related to vegetables, and recently, in partnership with the PSARTI, the NAEC developed instructional booklets for vegetable cultivation. The Director of the NAEC claims that they will become responsible for testing new varieties in August 2014, but this was not confirmed by any other key informant.

## 4.3 Constraints and Market-based Solutions

During the analysis of the vegetable value chain a number of constraints were cited by the market actors interviewed. The table below presents these constraints, along with potential market-based solutions that could address them. The market-based solutions in the highlighted cells in the table below represent those that were prioritized for further assessment (the prioritization process used is described in more detail below).

| **Value Chain Constraint** | **Market-Based Solution (MBS)** |
| --- | --- |
| Vegetable farmers lack technical knowledge in modern cultivation techniques, particularly for modern high yielding open pollinated (OP) varieties and hybrid varieties, which limits their productivity. | 1. Training about modern cultivation techniques for vegetable farmers. |
| Farmers lack access to farm equipment and machinery (greenhouses, tractors, attachments, etc.), limiting their productivity and ultimately their income. | 1. Access to farm equipment and machinery for farmers, particularly during harvest |
| Farmers lack knowledge about which are the most appropriate chemical inputs (type, brand, etc.) for their growing conditions (soil, climate, etc.) and how to use them effectively, reducing productivity and income | 1. Training on appropriate chemical types and usage for farmers |
| Farmers (and many informal importers) lack knowledge of the differences between seed varieties (and even the difference between OP and hybrid seed) and which varieties (type, brands, characteristics, etc.) are appropriate for their growing conditions (soil, climate, etc.) often basing their buying decision solely on duration stated on the seed packets. They therefore may choose suboptimal seed limiting their productivity. | 1. Training on the differences (advantages and disadvantages) of seed varieties for farmers |
| Restricted access to Bars wholesalers for traders and farmers limits farmers’ ability to access markets and reduces their income. | 1. Access to alternative markets for traders and farmers, particularly during peak production seasons |
| Farmers lack access to information about which quality crops (size, shape, etc.) are in demand in the market, resulting in them getting lower prices. | 1. Access to information about the quality of crops (size, shape, etc.) which are in demand |
| Farmers in areas distant from Ulaanbaatar, are unable to compete with farmers living closer to the city, particularly during peak production times, due to increased costs (particularly transportation). | 1. Access to alternative markets for farmers living in remote areas, particularly during peak production times 2. Access to information about alternative crops (early/late varieties, different species, etc.) for farmers in remote areas, which don’t compete directly against crops grown near Ulaanbaatar 3. Access to lower cost transportation to Ulaanbaatar for farmers living in remote areas |
| Labor costs, particularly during harvest, are very high, reducing farmers’ ability to expand production and limiting their potential yields and income. | 1. Access to low-cost labor for farmers, particularly during harvesting |
| The skill level of day-laborers, particularly during harvest, is low, resulting in damage to the crop, reduced productivity and ultimately lower farmers’ income. | 1. Training of laborers in appropriate techniques to cultivate and harvest vegetables |
| Farmers lack sufficient knowledge to create a comprehensive cropping plan (crop rotation, planting/harvesting times, etc.) which would allow them to maximize productivity. This limits their yields and income. | 1. Training in production planning for farmers |
| Many small-scale vegetable farmers are unaware of provisions in the new “Food Security Law” which include traceability requirements and requirements for “Good Agricultural Practices” (GAP) and “Good Hygiene Practices” (GHP). This may limit their access to markets in the future. | 1. Access to information for farmers about traceability requirements in the “Food Security Law” 2. Training for farmers about GAP requirements in the “Food Security Law” 3. Training for farmer-processors about GHP requirements in the “Food Security Law” |
| “Seed and Variety Law” makes it very difficult to import new varieties of vegetables, restricts the amount of seed imported, and ultimately limits farmers’ access to high quality varieties of seed. This reduces their productivity and income. | 1. Access to lobbying services for seed importers to update/amend the “Seed and Variety Law” to make it easier to import vegetable seed |
| Acquiring access to land for vegetable farming from the local government is difficult and time consuming, limiting farmers’ ability to expand the area they have under cultivation. | 1. Access to lobbying services for farmers to advocate for greater allocation of land for vegetable cultivation |
| Limited access to finance (often because of outstanding loans, collateral requirements, etc.) limits farmers’ ability to invest in expanding production area (i.e. leasing land). | 1. Access to finance for farmers to expand production area |
| Limited access to finance (often because of outstanding loans, collateral requirements, etc.) limits farmers’ ability to invest in new infrastructure (greenhouses, storage, irrigation, etc.) | 1. Access to finance for farmers to invest in new infrastructure |
| Limited access to finance (often because of outstanding loans, collateral requirements, etc.) limits farmers’ ability to invest in new equipment and machinery (tractors, attachments, etc.) | 1. Access to finance for farmers to invest in new equipment and machinery |
| Limited access to finance (often because of outstanding loans, collateral requirements, etc.) limits farmers’ ability to invest in improved inputs (seeds, herbicides, pesticides, fertilizers, etc.). | 1. Access to finance for farmers to invest in improved inputs |
| Supply of quality vegetable seeds is limited (particularly high-demand seed for pickling cucumbers, hybrid cabbage, etc.) reducing farmers’ productivity and income. | 1. Access to improved seed for farmers, particularly for high-demand varieties (e.g. pickling cucumbers, hybrid cabbage, etc.) |
| Inconsistent supply of seed (in terms of variety availability, packaging, etc.), particularly from informal seed importers sourcing in China, limits farmers ability to consistently source proven varieties resulting in reduced yields and income. | 1. Access to consistent supply of quality seed for farmers |
| Limited supply of quality chemicals (fertilizer, herbicides, pesticides) limits farmers’ access to these chemicals and reduces their yield and income | 1. Access to quality chemicals (fertilizer, herbicides, pesticides) for farmers |
| Limited availability of appropriate storage (for all vegetables) limits farmers’ ability to access higher value seasonal markets. | 1. Access to appropriate storage for farmers |
| High cost of renting space in winter greenhouses makes locally produced vegetables uncompetitive with imported vegetables from China. This limits farmers’ ability to produce for more than one season per year reducing their potential incomes. | 1. Access to affordable space in winter greenhouses for farmers |

## 4.4 Prioritization of Market-based Solutions

Once the final list of constraints and (potential) market-based solutions (MBSs) was identified, the team prioritized each of the MBSs on the basis of i) their potential to increase the growth and competitiveness of the vegetable value chain, and ii) the number of farmers (MSMEs) in the target group that will benefit (both directly and indirectly). The grid below shows how each of the market-based solutions from the table above was prioritized and ranked.

High

Medium

High

Low

Low

Medium

5, 12

**No. of MSMEs in Target Group that will benefit (directly & indirectly)**

6, 13

10, 15, 17

2, 7, 8, 9, 20

11, 18

1, 3, 4, 22, 23, 24, 25

19

16, 26

**Potential to Increase Value Chain Growth and Competitiveness**

14, 21

Figure 7: Market-Based Solution Short-Listing Matrix – Vegetable Value Chain

Based on the similar nature of the MBSs, and the similar market actors involved it was determined by the team to consolidate MBSs 1, 3, and 4 into a single MBS, and MBSs 22, 23, and 24 into another MBS. Once this was done, the following MBSs were identified as having the highest potential to meet the above-mentioned criteria:

* Provision of information/training on modern cultivation techniques to increase yields for vegetable farmers including:
  + appropriate chemicals and proper usage
  + differences between seed varieties and brands
* Access to quality inputs for vegetable farmers including:
  + a consistent supply of quality seed varieties
  + appropriate chemicals for crop production
* Access to appropriate storage for vegetable farmers

It is important to note that as the program develops, some of these MBSs (and corresponding constraints) may be revisited based on better understanding, new opportunities for program interventions, or if realities on the ground in the value chain change. It would also be advantageous to promote the remaining MBSs if time and resources allow.

# 5. Assessment of Market-based Solutions & Identification of Program Facilitation Activities

Having completed the aforementioned activities, the team carried out assessments of the prioritized market-based solutions (MBSs). These assessments included interviews with existing or potential private sector providers of the targeted MBSs to better understand the incentives and challenges they face in providing the MBSs in a sustainable manner. On June 18th AFE and the EMIRGE team organized three “focus group discussions” (FGDs) in Kigali that brought different market actors together. The first FGD focused on input supply companies, the second was to include processing companies, and the third was to include storage companies. While the input supply FGD was a success, only one processing company showed up to the second FGD, and no invited participants showed up for the storage FGD. Given the interest shown by the input supply companies in the FGD, and the limited amount of time remaining in the current agricultural season, AFE recommends that EMIRGE focus on developing initial activities with input supply companies. Follow up interviews and/or FGDs can be conducted as necessary with processors and storage companies after the growing season ends in September/October to further explore MBSs.

Input supply FGD participants included representatives from two input supply companies which sell a range of seed, chemicals, and farm equipment, a representative of Elite Seed (a seed company formed by MFARD), and a representative of the RIPP. The discussions were structured to validate assumptions regarding the incentives and challenges that these market actors (Lead Firms) face in providing access to higher quality inputs (seed, chemicals, and farm equipment) for vegetable production, as well as information about how to effectively use those inputs, and to solicit ideas and initiatives that they could undertake to address them. Discussions were also held to discuss facilitation activities that the EMIRGE program could undertake to support the Lead Firms in their initiatives, which ultimately would result in sustainable impact for targeted vegetable farmer (see appendix 7 for PPTs used for the FGD).

The following tables describe the assessments, proposed Lead Firm initiatives, and illustrative EMIRGE facilitation activities.

| MARKET-BASED SOLUTION (MBS) #1: |
| --- |
| Provision of **information/ training on modern cultivation techniques** to increase yields for vegetable farmers including:   * **training on appropriate chemicals and proper usage** * **information about different seed varieties and brands** |
| VALUE CHAIN CONSTRAINT |
| 1. Vegetable farmers lack technical knowledge in modern cultivation techniques, particularly for modern high yielding open pollinated (OP) varieties and hybrid varieties, which limits their productivity. 2. Farmers lack knowledge about the most appropriate chemical inputs (type, brand, etc.) for their growing conditions (soil, climate, etc.) and how to use them effectively, reducing productivity and income 3. Farmers (and many informal importers) lack knowledge of the differences between seed varieties (and even the difference between OP and hybrid seed) and which varieties (type, brands, characteristics, etc.) are appropriate for their growing conditions (soil, climate, etc.) often basing their buying decision solely on duration stated on the seed packets, and therefore may choose suboptimal seed limiting their productivity. |
| EXISTING OR POTENTIAL MBS PROVIDERS[[7]](#footnote-7) |
| 1. *National Agricultural Extension Center (NAEC)* 2. *Agricultural University* 3. *Plant Science and Agricultural Research and Training Institute (PSART)* 4. *Vocational training centers* 5. Informal seed/chemical importers 6. Input supply companies (equipment, seed, chemical) 7. Processors 8. Wholesalers/traders |
| CHALLENGES AND INCENTIVES TO PROVIDING THE MBS |
| Currently no one is providing formal training to farmers, aside from a few NGOs. Because most farmers have never received formal training, most of them are using traditional methods that they have used since the socialist period (1970s-80s). Many of the private sector actors identified lack the skills and resources capable of providing training; however, during interviews a number of actors expressed potential interest in promotional activities which would include formal trainings, demonstrations, and/or field days. |
| *Government Agencies (not commercially viable)*  **Challenges**: 1) government agencies lack the resources necessary to conduct trainings as per their mandates; 2) government agencies only provide information about the 14 officially released OP varieties, despite the fact that many farmers are growing other varieties of vegetables  **Incentives**: Increased ability to fulfill mandate for government, and increased revenue for the government staff (if they charge fees)  *All Potential Commercial Providers*  **Challenges**: to develop, print, and/or distribute training and other information materials and/or organize demonstration plots, field days, training, etc. all providers lack: 1) the necessary staff, 2) expertise, and 3) particularly funding.  **Incentives**: 1) increased sales of equipment, seed, and/or chemicals to farmers; 2) improved reputation and customer loyalty; 3) supporting improved production of vegetables in Mongolia  *Input Supply Companies*  **Challenges**: 1) weak distribution systems (often only a single retail outlet) and thus would be challenged to extend services to farmers (collaboration with local-level actors would be necessary); 2) lack access to consistent supplies of quality inputs; 3) formal input supply companies may be unwilling to take on the additional costs of providing information to farmers because they are competing against informal importers who already have lower cost structures and prices  **Incentives**: 1) increased brand image; 2) increased sales of equipment, seed, and/or chemicals  *Informal Seed/Chemical Importers*  **Challenges**: 1) weak distribution systems (often selling out of their homes or only a single retail outlet) and thus would be challenged to extend services to farmers (collaboration with local-level actors would be necessary); 2) lack access to consistent supplies of quality inputs; 3) informal seed / chemical importers are not importing legally, and so they may be reluctant to promote their products officially through organizing training, information materials, demonstration plots, field days, etc.; 4) many informal importers themselves lack knowledge to effectively cultivate the varieties of seed and/or apply the chemicals they are importing  **Incentives**: 1) increased brand image; 2) increased sales of equipment, seed, and/or chemicals  *Vegetable Wholesalers / Traders*  **Challenges**: wholesalers and traders lack incentives to invest in their supply chains. They typically focus primarily on their own production, and many (particularly larger wholesalers) have inconsistent relationships with vegetable producers  **Incentives**: 1) improved productivity and higher quality produce for traders; 2) better relationship with suppliers; 3) ability to comply with traceability and quality requirements enshrined in the new Food Security Law  *Processors*  **Challenges:** processors are only interested in a few varieties/crops based on the pickled products they are producing potentially limiting outreach  **Incentives**: 1) increased ability for processors to source sufficient quantity and quality of inputs for pickling; 2) better relationship with suppliers; 3) ability to comply with traceability and quality requirements enshrined in the new Food Security Law |
| CHALLENGES AND INCENTIVES FOR FARMERS TO USE THE MBS |
| *Small-holder Vegetable Farmers*  **Challenges**: 1) farmers do not understand the differences between modern varieties and the varieties that they are accustomed to produce, and so do not understand the need to use modern techniques; 2) farmers have never been exposed to new techniques, and are therefore reluctant to adopt them; 3) farmers have limited funds to pay fees for training or information; 4) farmers may be challenged by the distances and times required for travel and participation for training/information; 5) much of the packaging/instructions of imported inputs are written in Chinese, Korean, or other languages making it difficult for all market actors to understand the instructions  **Incentives**: Most farmers have never received training related to vegetable cultivation, but rather have been learning traditional techniques through informal sharing with expert farmers (many of whom are retired) trained during the socialist period. Many of them are eager to learn new techniques which can improve their 1) productivity; 2) yields; and 3) income. |
| PROPOSED PROVIDER OF THE MBS |
| **Input supply companies (primary provider)**  Rationale: The larger formal input supply companies are the only market actors with sufficient resources to carry out the outreach necessary to provide information and training to farmers, and many of them expressed interest in expanding their sales, potentially conducted in collaboration with informal seed/chemical importers, local retailers, and/or expert farmers who could act as commissioned agents.  **Processing companies** **(secondary provider)**  Rationale: Processing companies may also be interested in providing information on a more limited scale for the particular varieties/vegetables they are sourcing because they often face difficulty in obtaining a sufficient quantity of vegetables for pickling, and providing technical information would allow the company to help improve productivity increasing supply and will also build a stronger relationship with the farmers which will encourage them to sell to the pickling companies.  *NOTE: Given the greater potential outreach, AFE recommends that EMIRGE focus, at least initially, on working with input supply companies.* |
| ILLUSTRATIVE LEAD FIRM INITIATIVES |
| Illustrative initiatives (proposed by input supply companies during interviews and FGDs) to overcome challenges they face in providing the targeted MBS include:   * increase distribution of existing training materials (such as those prepared by the NAEC) * create and distribute new informational materials (booklets, pamphlets, posters, etc.) with product-specific information/advice * organize demonstrations and field days to promote new varieties / techniques * organize training events and field days to promote new varieties / techniques * establish relationships with local retailers, expert farmers, and other local market actors to act as agents, and build their capacity so that they can in turn provide technical support to vegetable farmers   *NOTE: Firms will organize and conduct these activities themselves with potential technical and financial support from Global Communities* |
| ILLUSTRATIVE EMIRGE FACILITATION ACTIVITIES TO SUPPORT LF INITIATIVES |
| Illustrative EMIRGE facilitation activities to support LFs to implement their initiatives include the following (*these are tentative at this point based on results of interviews and FGDs; the ultimate facilitation activities will depend on the specific initiatives proposed by LFs and subsequent discussions between EMIRGE and LFs after the LFs submit applications in response to the IFA)*:   1. **Support input supply companies to identify existing informational material relevant for the products they are marketing to farmers.** Support companies to:  * identify sources of existing informational material developed in Mongolia appropriate for the products the company wants to promote. * develop strategies for distributing the materials through their distribution networks * provide financial support (if necessary) to cover a portion of the costs to purchase these materials * conduct research on the effectiveness of the materials to: a) change farmer practices; b) improve farmer yields; and c) increase sales of company products  1. **Support input supply companies to develop informational and promotional materials that can be distributed to farmers with product-specific advice.**  * Support company to conduct a needs assessment with farmers related to vegetable production (based on the products the company is interested in promoting) * Facilitate strategic planning sessions with the company (based on question guides developed with technical and communication experts) that will help them to determine:   + the objectives of the company in developing and sharing these materials   + technical production practices and/or inputs which will be promoted through these materials   + what materials will be most effective communicating the technical and promotional messages   + how will these materials be disseminated to farmers * use question guide to support the company through a planning session for the development of these materials, including the development of a budget * provide feedback on draft materials developed by company and/or consultants * provide financial support (if necessary) to cover a portion of the costs to design and print these materials (e.g. 70% in Year 1, 50% in Year 2) * support company to conduct research on the effectiveness of the materials to: a) change farmer practices; b) improve farmer yields; and c) increase sales of company products  1. **Support input supply companies to conduct field demonstrations in target areas**.  * facilitate strategic planning sessions with the company (based on a question guide developed with technical experts) to support the company to determine:   + the objectives of the field demonstrations   + technical production practices and/or inputs which will be used on the demonstration plots   + how many field demonstrations will there be   + where will the field demonstrations be located   + what will be the company’s role in managing the field demonstrations   + how will the demonstration plot motivate farmers to adopt improved production practices * use question guide to support the company through a planning session for these field demonstrations, including the development of a budget * support company to organize demonstration plots and field days to share the results of the demonstration plots with a wider audience (*see point 4 below*) * provide financial support for a portion of the costs of field demonstrations and associated field days (e.g. 70% in Year 1, 50% in Year 2) * support company to conduct research on the effectiveness of the trainings and field days to: a) change farmer practices; b) improve farmer yields; and c) increase sales of company products  1. **Support input supply companies to conduct training events/field days for farmers.**  * Support company to:   + conduct a needs assessment with farmers related to vegetable production (based on the products the company is interested in promoting)   + develop content and training module for producer training activities and/or field days (related to products the company is interested in promoting) together with technical experts   + identify individuals (company staff, technical experts, expert farmers, etc.) who will provide training to farmers   + conduct “training of trainers” (TOT) for the identified individuals   + conduct training activities for farmers * observe trainings and provide feedback to trainers to improve effectiveness * provide financial support for a portion of the costs of training events/field days (e.g. 70% in Year 1, 50% in Year 2) * support company to conduct research on the effectiveness of the trainings and field days to: a) change farmer practices; b) improve farmer yields; and c) increase sales of company products  1. **Support input supply companies to identify local retailers, expert farmers, or other local market actors and build their capacity to act as commissioned agents for the company and provide technical information about company products directly to farmers.**  * Support company to:   + develop a distribution system and commission rates for local agents to promote and sell the company’s products   + identify individuals (local input supply retailers, expert farmers, informal importers, etc.) interested in acting as commissioned agents for the company in the target areas   + conduct a needs assessment with potential commissioned agents related to vegetable production (based on the products the company is interested in promoting)   + conduct trainings for the potential commissioned agents so they understand the commission system   + conduct “training of trainers” (TOT) for the potential commissioned agents so that they can build the capacity of local farmers * observe trainings of farmers conducted by commissioned agents and provide feedback to agents to improve effectiveness * provide financial support for a portion of the costs of training the commissioned agents (e.g. 70% in Year 1, 50% in Year 2) * support company to conduct research on the effectiveness of the commissioned agents in: a) changing farmer practices; b) improving farmer yields; and c) increasing sales of company products |

| MARKET-BASED SOLUTION (MBS) # 2 |
| --- |
| **Access to quality inputs** for vegetable farmers including:   * A consistent supply of quality seed varieties * Appropriate chemicals for crop production |
| VALUE CHAIN CONSTRAINT |
| 1. Supply of quality vegetable seeds is limited (particularly for high-demand varieties for pickling cucumbers, hybrid cabbage, etc.), reducing farmers’ access to improved seed and ultimately reducing their productivity and income 2. Inconsistent supply of seed (in terms of variety availability, packaging, etc.), particularly from informal seed importers sourcing in China, limits farmers ability to consistently source proven varieties which reduces farmers’ yields and income. 3. Limited supply of quality chemicals (fertilizer, herbicides, pesticides) limits farmers’ access to these chemicals, reducing their yield and income |
| EXISTING OR POTENTIAL MBS PROVIDERS |
| 1. *Plant Science and Agricultural Research and Training Institute (PSART)* 2. *Plant Protection Institute* 3. *Mongolia Farmers Association for Rural Development (MFARD)* 4. Seed multipliers 5. Input supply companies (equipment, seed, chemical) 6. Informal seed/chemical importers 7. Processors |
| CHALLENGES AND INCENTIVES TO PROVIDING THE MBS |
| The market for inputs (seed and chemicals) is highly fragmented, with very few (less than 10) formal companies involved in importing and sales. Many small-scale local actors importing and selling informally lack the ability to ensure the quality of the inputs they are importing and selling. |
| *Government Agencies (not commercially viable)*  **Challenges**: 1) lack the resources necessary to produce and distribute seed and other inputs as per their mandate; 2) are only able to multiply and distribute the 14 officially released varieties of seed  **Incentives**: Increased ability to meet their mandates  *MFARD (unlikely to be commercially viable)*  **Challenges**: MFARD is currently heavily subsidized through the SDC-funded “Mongolian Potato Program” (MPP), and uses these subsidies to source and distribute inputs at very low costs through its members reducing competitiveness of other seed importers. It is unclear at what scale they will be able to continue their activities once the project ends in 2015.  **Incentives**: 1) increased ability to meet their mandate; and 2) additional revenue through sales of seed to compensate for reduced donor funding  *All Potential Commercial Providers*  **Challenges**:1) No actors have the technical ability to breed or produce hybrid varieties in Mongolia; 2) Much of the packaging / information is written in Chinese, Korean, or other languages making it difficult for all market actors to differentiate between inputs;  **Incentives**: 1) increased sales of equipment, seed, and/or chemicals to farmers; 2) improved reputation and customer loyalty; 3) supporting improved production of vegetables in Mongolia  *Seed Multipliers*  **Challenges**: 1) Mongolian seed multipliers lack direct connections with farmers in areas outside of their home provinces, and direct connections with retailers from other provinces has been reduced in recent years as MFARD has taken up an intermediary role in buying from the multipliers and selling at subsidized rates to the retailers; 2) many seed multipliers lack the technical knowledge to effectively produce modern high yielding varieties (as well as hybrid varieties), limiting their productivity and potential outreach.  **Incentives**: 1) increased sales of seed to farmers; 2) improved reputation and customer loyalty; 3) supporting improved production of vegetables in Mongolia  *Input Supply Companies*  **Challenges**: Input supply companies (equipment, seed, chemical) lack information of, and access to new sources of quality inputs, and may lack the knowledge to source the most appropriate inputs  **Incentives**: 1) increased sales of equipment, seed, and/or chemicals to farmers; 2) improved reputation and customer loyalty; 3) supporting improved production of vegetables in Mongolia  *Informal Seed/Chemical Importers*  **Challenges**: informal importers lack 1) knowledge to differentiate between different inputs when sourcing; 2) sufficient scale and knowledge to enter into formal relationships with suppliers/wholesalers. Most can only purchase a small amount of product from retailers in China.  **Incentives**: 1) increased sales of seed and/or chemicals to farmers; 2) improved reputation and customer loyalty; 3) supporting improved production of vegetables in Mongolia  *Processors*  **Challenges**: 1) lack information of, and access to new sources of quality inputs; 2) may lack the knowledge to source the most appropriate inputs (i.e. which inputs are most appropriate for pickling); 3) input supply is not the primary focus of their business; 4) are only interested in a few varieties/crops based on the pickled products they are producing potentially limiting outreach; 5) some currently distribute seed to a select number of farmers on credit, some of whom may engage in arbitrage and on-sell much of the seed for a substantial profit  **Incentives**:improved quantity and quality of produce for pickling |
| CHALLENGES AND INCENTIVES FOR FARMERS TO USE THE MBS |
| *Small-holder Vegetable Farmers*  **Challenges**: 1) many farmers are price sensitive and prefer to purchase the cheapest inputs possible regardless of quality; 2) some farmers are reluctant to try new techniques or new brands of inputs, so a change in mindset may be necessary; 3) farmers lack knowledge of the differences between seed varieties (and even between the difference between OP and hybrid seed) and which varieties (type, brands, characteristics, etc.) are appropriate for their growing conditions (soil, climate, etc.) often basing their buying decision solely on duration stated on the seed packets, and therefore may choose suboptimal seed limiting their productivity; 4) quality inputs are often not available on a consistent basis because importers cannot guarantee that they will be able to purchase the same brands/varieties every year; 5) much of the packaging / information is written in Chinese, Korean, or other languages making it difficult for farmers to differentiate between inputs  **Incentives**: Quality inputs will help farmers increase 1) yields; 2) quality of their produce; and 3) ultimately their income. |
| PROPOSED PROVIDER OF THE MBS |
| **Input supply companies (primary provider)**  Rationale: The larger formal input supply companies are the only market actors with sufficient resources to carry out the outreach necessary to provide information and training to farmers. Many of them realize that their distribution systems could be expanded beyond only one retail outlet and expressed interest in expanding their outreach, potentially conducted in collaboration with informal seed/chemical importers, local retailers, and/or expert farmers who could act as commissioned agents.  **Processing companies** **(secondary provider)**  Rationale: Processing companies may also be interested in: 1) providing access to inputs (particularly seed) on a more limited scale for the particular varieties/vegetables they are sourcing because they often face difficulty in obtaining a sufficient quantity of vegetables for pickling, and; 2) providing technical information to farmers that would improve productivity, increase supply and build stronger relationships with the farmers which will encourage them to sell to the pickling companies.  *NOTE: Given the greater potential outreach, AFE recommends that EMIRGE focus, at least initially, on working with input supply companies.* |
| ILLUSTRATIVE LEAD FIRM INITIATIVES |
| Illustrative initiatives (proposed by input supply companies during interviews and FGDs) to overcome challenges they face include:   * exposure visits in Mongolia or other countries to identify new sources of agricultural inputs (potentially in collaboration with processing companies) * improve capacity to identify quality seed which can be produced in Mongolian conditions through formal trials * work with PSART, STC, and RIPP to secure approval of new varieties of seed for multiplication and/or new varieties of seed and chemicals for import and sale in Mongolia * organize and provide training to seed multipliers to multiply new varieties of seed in Mongolia * organize demonstrations and field days to promote new varieties / techniques * establish relationships with local retailers and/or expert farmers to act as agents, and build their capacity so that they can in turn market inputs directly to vegetable farmers   *NOTE: Firms will organize and conduct these activities themselves with potential technical and financial support from Global Communities* |
| ILLUSTRATIVE EMIRGE FACILITATION ACTIVITIES |
| Illustrative EMIRGE facilitation activities to support LFs to implement their initiatives include the following (*these are tentative at this point based on results of interviews and FGDs; the ultimate facilitation activities will depend on the specific initiatives proposed by LFs and subsequent discussions between EMIRGE and LFs after the LFs submit applications in response to the IFA)*:   1. **Support input supply companies to conduct exposure visits in Mongolia and other countries to identify new sources of inputs (potentially in collaboration with processing companies).**  * Support companies to:   + define the visit purpose and objectives   + conduct research into potential sites and organizations to visit   + contact potential sites and companies to arrange visits   + determine an appropriate itinerary that is both educational and cost-effective   + draft a contract, if necessary, with the hosting agents   + coordinate the travel logistics   + ask pertinent questions during the study tour to ensure objectives are being met * evaluate the exposure visit and establish a follow-up work plan for implementing new ideas and/or importing new varieties of seed and/or chemicals identified during the exposure visit * provide financial support for a portion of the costs (e.g. 70% for the first trip, 50% for the second trip, etc.)  1. **Support input supply companies (potentially in collaboration with processing companies) to improve capacity to identify quality seed which can be produced in Mongolian conditions through formal trial.**  * Support companies to:   + determine the purpose of the trial plots   + determine who will manage the trial plots, including the potential role of farmers responsible for cultivating the trial plot   + information to be collected and the format for recording trial plot results   + determine the role (if any) for commissioned agents in supporting/managing the trial plots   + choose the area to be used for trial plots   + determine the number of trial plots and their size   + develop a work plan for establishing trial plots * provide financial support to cover a portion of the costs of trial plots (e.g. 70% in Year 1, 50% in Year 2)  1. **Support input supply companies to work with PSART, STC, and RIPP to secure approval of new varieties of seed for multiplication and/or new varieties of seed and chemicals for import and sale in Mongolia.**   Support companies to:   * + develop formal relationships with relevant government agencies responsible for regulating the products that the companies want to market   + comply with government regulations for testing and approval of seed and chemicals   + receive formal permission for import and/or sale of new varieties of seed and chemicals * provide financial support to cover a portion of the government testing of new varieties of seed and chemicals (e.g. 70% in Year 1, 50% in Year 2)  1. **Support input supply companies to organize and provide training to seed multipliers to multiply new varieties of seed in Mongolia.**   Support companies to organize outgrowing operations to multiply new varieties of seed in Mongolia[[8]](#footnote-8) by answering question guides related to:   * + deciding to establish an outgrowing staff   + hiring staff for outgrowing operations   + selecting and engaging lead farmers   + selecting outgrowers   + communicating with outgrowers   + providing technical assistance to outgrowers   + providing credit to outgrowers   + ensuring outgrower access to appropriate inputs, including seed   + determining price for outgrower produce   + procuring from outgrowers   + developing a seed program   + developing demonstration plots   + developing trial plots   + management information systems for outgrowing operations  1. **Support input supply companies to organize field demonstrations and field days to promote new varieties / techniques.**  * Support companies to develop a question guide with technical experts to support the company to determine:   + the objectives of the field demonstrations   + technical production practices and/or inputs which will be used on the demonstration plots   + how many field demonstrations will there be   + where will the field demonstrations be located   + what will be the company’s role in managing the field demonstrations   + how will the demonstration plot and associated field day motivate farmers to adopt improved production practices * use question guide to support the company through a planning session for these field demonstrations and associated field days, including the development of a budget * Support companies to:   + conduct a needs assessment with farmers related to vegetable production (based on the products the company is interested in promoting)   + develop content for field days (related to products the company is interested in promoting) together with technical experts   + identify individuals (company staff, technical experts, expert farmers, etc.) who will provide information to farmers at field days   + conduct “training of trainers” (TOT) for the identified individuals   + conduct field days at the location of the field demonstrations to promote company products and/or improved production practices * provide financial support for a portion of the costs of field demonstrations and associated field days (e.g. 70% in Year 1, 50% in Year 2) * conduct research on the effectiveness of the field demonstrations and field days to: a) change farmer practices; b) improve farmer yields; and c) increase sales of company products  1. **Support input supply companies to identify local retailers, expert farmers, or other local market actors and build their capacity to act as commissioned agents for the company and market inputs directly to farmers.**   Support company to:   * + develop a distribution system and commission rates for local agents to promote and sell the company’s products   + identify individuals (local input supply retailers, expert farmers, informal importers, etc.) interested in acting as commissioned agents for the company in the target areas   + conduct a needs assessment with potential commissioned agents related to vegetable production (based on the products the company is interested in promoting)   + conduct trainings for the potential commissioned agents so they understand the commission system   + conduct “training of trainers” (TOT) for the potential commissioned agents so that they can market company products directly to farmers   + observe trainings of farmers conducted by commissioned agents and provide feedback to agents to improve effectiveness * provide financial support for a portion of the costs of training the commissioned agents (e.g. 70% in Year 1, 50% in Year 2) * support company to conduct research on the effectiveness of the commissioned agents in: a) changing farmer practices; b) improving farmer yields; and c) increasing sales of company products |

| MARKET-BASED SOLUTION (MBS) # 3 |
| --- |
| Access to small-scale vegetable storage equipment for producers |
| VALUE CHAIN CONSTRAINT |
| Limited availability of appropriate storage (for all vegetables) at the producer-level limits farmers’ ability to access higher value markets. |
| EXISTING OR POTENTIAL MBS PROVIDERS |
| 1. Wholesalers / traders 2. Storage equipment companies |
| CHALLENGES AND INCENTIVES TO PROVIDING THE MBS |
| During the peak production season, prices are low because there is only one major outlet (Bars wholesale market) where everyone tries to sell. Most farmers lack access to appropriate storage for all vegetables, but particularly for crops other than potato, carrot, and turnips. This lack of storage means that farmers have to sell immediately the day of harvest which prevents them from selling in markets where (or at times when) prices might be higher. This reduces their income. |
| *Storage Equipment Companies*  **Challenges**: 1) lack of small-scale vegetable storage equipment that would be affordable to small-scale vegetable farmers;  **Incentives**: 1) ability to increase sales and revenue through offering storage equipment appropriate to small-scale vegetable farmers  *Wholesalers/Traders*  **Challenges**: 1) wholesalers and traders purchase at a low price during the peak season and store themselves for later sale; 2) lack of awareness of storage equipment appropriate to small-scale vegetable farmers  **Incentives**: 1) promoting small-scale vegetable storage equipment to farmers could increase the volume of products available to purchase in the market during the non-peak season; 2) improved quality of produce purchased from farmers |
| CHALLENGES AND INCENTIVES FOR FARMERS TO USE THE MBS |
| *Small-holder Vegetable Farmers*  **Challenges**: 1) most modern storages are near to Ulaanbaatar and are owned by traders and/or wholesalers who do not rent space to other farmers, making it difficult for individual small-scale farmers to access them; 2) it is expensive to build modern storages, often too expensive for farmers to build on their own; 3) access to finance can be difficult because of high collateral requirements and outstanding loans; 4) most storage equipment available is not adequate for storing non-tuber crops, particularly cabbage and “uncommon vegetables”  **Incentives**: Storage would allow farmers to avoid selling during peak production periods, allowing farmers to sell at higher prices and earn additional income. |
| PROPOSED PROVIDER OF THE MBS |
| **Storage Equipment Companies**  Rationale: Storage equipment importers/sellers would be able to increase their sales of equipment.  *NOTE: Challenges and incentives of storage equipment companies need to be confirmed in follow up interviews, FGDs, and other discussions between EMIRGE and these market actors, because they were unable to attend the FGDs* |
| ILLUSTRATIVE LEAD FIRM INITIATIVES |
| Illustrative initiatives proposed by storage companies to help overcome challenges they face in procuring and selling small-scale vegetable storage equipment to farmers in EMIRGE target areas include:   * conduct exposure visits in other countries to identify modern designs and management techniques for small-scale modern storage for vegetables * work with financial institutions to develop financing options for farmers to purchase small-scale storage equipment for vegetables * provide information about small scale storage options appropriate for farmers   *NOTE: Firms will organize and conduct these activities themselves with potential technical and financial support from Global Communities* |
| ILLUSTRATIVE EMIRGE FACILITATION ACTIVITIES |
| Illustrative EMIRGE facilitation activities to support LFs to implement their initiatives:   1. **Support storage equipment companies to conduct exposure visits in other countries to identify small-scale storage equipment for vegetables**.  * Support companies to:   + define the visit purpose and objectives   + conduct research into potential sites and organizations to visit through a review of websites such as alibaba.com[[9]](#footnote-9)   + contact potential sites and companies to arrange visits   + determine an appropriate itinerary that is both educational and cost-effective   + draft a contract, if necessary, with the hosting agents   + coordinate the travel logistics   + ask pertinent questions during the study tour to ensure objectives are being met   + evaluate the exposure visit and establish a follow-up work plan for procuring new equipment or producing locally. * Provide financial support for a portion of the costs (e.g. 70% for the first trip, 50% for the second trip, etc.) * Support companies to carry out marketing and promotional activities of the new equipment with small-scale vegetable farmers  1. **Support storage equipment companies to work with financial institutions to develop financing options for farmers to purchase small-scale storage equipment for vegetables**  * Support company to:   + identify the credit needs and/or capital short-falls of targeted farmers   + collect information on loan products, lending practices, branch locations, etc. for area financial institutions and prepare a short-list of potential institutions for further exploration   + conduct visits to other companies and/or financial institutions currently engaged in similar arrangements to learn how they are organized.   + prepare and present a proposal to selected financial institutions describing the loan product   + assist farmers to complete documents and forms from financial institutions for opening an account, applying for a loan, etc.   + carry out marketing and promotional activities of the new equipment and loan product with small-scale vegetable farmers |

# Recommendations and Next Steps

On June 19th AFE gave a presentation to EMIRGE that summarized the program design exercises that were carried out. The presentation concluded with a discussion of next steps that EMIRGE should follow to facilitate systemic improvements in the vegetable value chain. AFE reviewed with EMIRGE a draft “Invitation for Application” (IFA) and description of activities which need to be completed by EMIRGE to implement its value chain program in the vegetable value chain. This section summarizes the steps presented to the EMIRGE team including next steps needed to implement the value chain program.

## 6.1 Methodology for assisting LFs to prepare/refine applications

To continue, EMIRGE will finalize the draft IFA which was presented (see Appendix 4). To do this, the relevant dates and budget amounts need to be finalized by the EMIRGE team. When this is completed, the IFAs can be distributed to potential lead firms. Additional lead firms can also be identified through public advertisements (described in Section 6.1.1 below). As discussed during the “Next Steps” presentation, EMIRGE initially may choose to limit the potential number of LFs by targeting only input supply companies initially. Input supply companies showed the greatest level of interest in working with EMIRGE. Given the limited amount of time remaining in the current agricultural season, AFE recommends focusing initial efforts on supporting input supply companies to carry out relatively simple initiatives (such as the organization of farmer field days) for their products in the target areas – but this will depend on what the LFs propose in their applications.

Focusing efforts on some of the simpler initiatives proposed by the LFs can result in “quick wins” that will allow EMIRGE to start activities and demonstrate concrete results prior to the end of the season in October. This will build EMIRGE’s track record and reputation with the private sector, and will make it easier to expand activities with a wider range of LFs in the future. Discussions on follow up activities with input supply companies and other market actors can take place over the winter, when there will be more time available for LFs to develop and propose more complex initiatives.

As applications are submitted by the different potential LFs, EMIRGE will work closely with the LFs to assess and review the applications. When reviewing, the following points should be considered:

* Potential impact of the interventions on MSME target group
* Conformance with criteria defined in the IFA
* Capacity of EMIRGE to monitor and provide technical/cost share support to LF
* Conformance with cost share rules

In addition to supporting the proposed initiatives of individual LFs, EMIRGE should also look for opportunities to support “cross-company” initiatives (such as exposure visits or technical training for a group of LFs that share the same interest). These opportunities may emerge when reviewing the applications of LFs and in subsequent discussions with them.

It should be noted that good writing and comprehensive explanations are *not* required for an application to be accepted. As companies submit applications, the EMIRGE staff assigned to support the application process will need to reach out to those companies and begin working closely with them to refine and revise their draft applications so that they present a clear concept and contain the information described in the IFA. To do this, a Question Guide (see Section 6.1.2 below for a full discussion on Question Guides) adapted to the specific proposed LF intervention may be useful to help the LF think about decisions/tasks that must be done to ensure preparation and implementation of interventions. Working with the LFs to develop their applications and using a question guide can position EMIRGE in the correct role of a “facilitator” by allowing the LFs to develop and define their own interventions. The application process is therefore as important as the end product.

Another important step in the application process is completion of due diligence. Efforts should be made to validate all information in the application and to ensure that the LF is a reputable company. AFE recommends that a Due Diligence Checklist be used to ensure that this step has been completed. An example of a checklist is seen in the table below:

|  |  |
| --- | --- |
| 1. Has a LF interview write-up (based on structured interview guide) been completed? If yes, please attach |  |
| 2. Has a site visit been conducted? If yes, describe. |  |
| 3. Describe additional due diligence that has been conducted to ensure that LF is reputable   * who was contacted? * how is determination being made? |  |
| 4. Describe any planning sessions that were held with LF to refine their application and budget |  |

Conducting a site visit (question 2 in the checklist above) is an important part of due diligence. To conduct a site visit, EMIRGE staff should visit the area(s) where the LF’s proposed initiative will take place. During the site visit, EMIRGE should:

* validate that statements presented in LF application are accurate
* meet with sampling of targeted producers
* validate that producers/MSMEs targeted by LFs interventions meet program criteria (e.g. poverty level, geographic area, gender, etc.)
* ensure that LF has conducted its own due diligence of the area

### 6.1.1 Using Public Advertisements to Identify Additional Companies and Program Activities

Public advertisements (through newspapers, associations, etc.) can be used to identify LFs that fit the profile and criteria established by EMIRGE. Even if EMIRGE decides to focus specifically on a smaller group such as seed importing companies, public advertisements should be used to help ensure that EMIRGE is: a) providing an equal opportunity to all qualified LFs that participate in the program, and; b) maximizing the number of LF participants. Though the MBS assessments and FGDs have already been conducted, there may be LFs that EMIRGE has not yet identified.

The goal of public advertisements is to invite LFs that fit EMIRGE’s criteria to submit an ***‘expression of interest’*** to collaborate with the program. EMIRGE can then review the expressions of interest submitted, compare the LFs with the identified selection criteria, and determine which of the LFs merit follow-up. When EMIRGE reviews the expressions of interest it should compare the LFs’ qualifications against the criteria, not against other LFs. An example advertisement that EMIRGE could use for agricultural input supply companies selling to vegetable farmers is presented below.

#### Advertisement

***Request for Expressions of Interest from Private Sector Companies selling Agricultural Inputs***

An international development program is inviting private sector companies selling agricultural inputs (seed, fertilizer, herbicides, pesticides, tools, machinery, etc.) to small-scale vegetable producers in the ***Selenge, Tov, and/or Darkhan*** provinces to submit an ***expression of interest*** to build their capacity to: (a) provide greater commercial access to quality agricultural inputs for small-holder vegetable farmers (less than 10 hectares), and; (2) provide training or information to small-holder vegetable farmers about quality agricultural inputs and modern cultivation techniques.

The opportunity to benefit from technical support from this program is open to all private-sector companies selling agricultural inputs which meet the following criteria:

* Must be licensed by Mongolian government authorities to import and/or sell agricultural inputs (seed, fertilizer, herbicides, pesticides, tools, machinery, etc.).
* Must have been in operation sourcing, importing and/or selling agricultural inputs for at least one year.
* Must have commercial interest and incentives to invest in extending products and services to Mongolian vegetable farmers in Selenge, Tov, and/or Darkhan provinces.
* Must have policies in place to ensure that no dangerous or illegal products are sold to farmers.
* Must be willing to invest at least 30% of the cost of the proposed initiatives.
* Must be willing to share activity and sales information relative to cost-shared endeavors.

*Note: NGOs, government agencies, consulting firms, and associations are not eligible to apply.*

Interested companies are requested to send an email to ndashtseren@mn.globalcommunities.org with their expression of interest for an application form (the next step for further consideration). Phone inquiries can be directed at +976-7011-4101.

All expressions of interest are due by August 29, 2014.

### 6.1.2 Using Question Guides to Facilitate Lead Firm Interventions

As the AFE consultants noted during the “Next Steps” presentation, Question Guides are an invaluable tool for working with LFs. As EMIRGE gets started with the process of building its relationships with LFs, AFE recommends that they develop Question Guides to help the LFs refine their proposed initiatives. As mentioned in Section 5.1, this will help ensure EMIRGE plays the correct role of “facilitator” by allowing LFs to develop and define their own initiatives.

Using Question Guides will help the LFs (and EMIRGE) think about all of the decisions/tasks to ensure preparation and implementation of interventions, and has proven successful for a wide variety of LF initiatives under diverse circumstances. However, it is important to adapt each question guide for the specific LF initiatives being proposed, which requires research into the proposed initiative to ensure questions are appropriate. For that reason EMIRGE may consider hiring an external technical consultant to help them to develop the Question Guides. An example question guide can be seen below:

#### Question Guide Example

*Developing Demonstration Plots*

* What are the objectives of your demonstration plot?
* What technical production practices and/or inputs will you use on your demonstration plots?
* How many and what size demonstration plots will you have?
* Where will you locate your demonstration plots?
* What is your role in managing demonstration plots?
* What is the farmers’ role in managing demonstration plots?
* How will you choose farmers to manage demonstration plots?
* How will you compensate farmers’ for managing the demonstration plots?
* How will you use the demonstration plots to motivate farmers to adopt improved production practices?

### 6.1.3 Structuring Collaboration with Lead Firms

After the LF’s proposed initiatives have been thoroughly reviewed and discussed, and once due diligence has been conducted, the collaboration needs to be carefully structured. This section describes how Memorandums of Understanding (MOU), and addendums to those MOUs (technical and financial support agreements), can be structured to provide clarity and benefits for both EMIRGE and the LFs. The section then presents guidelines for cost share financial support, as well as lessons learned in negotiating and managing agreements with LFs.

Memorandums of Understanding (MOUs)

Once EMIRGE is ready to collaborate with a LF it is advised to develop an MOU that provides an overview of activities to be promoted (along with general legal provisions), but that does not make firm commitments from EMIRGE for technical and financial support.

MOU “addendums” can then be added as needed to describe specific LF initiatives and corresponding technical and financial support from EMIRGE. An MOU addendum is tailored to a specific LF initiative, building on the foundation of the MOU. The creation of an MOU and addendums should be a collaborative effort - the LF and EMIRGE will have specific requirements and requests that need to be negotiated and discussed.

Advantages of having a general MOU followed by more detailed addendums include:

* signing a general MOU shows commitment without allocating resources
* MOUs can show progress to donors (while LF interventions are developing)
* addendums allow and encourage flexibility through an “incremental approach” in which learning takes place and trust develops with the LF as collaboration progresses

Additional instruction on what makes up successful MOUs and MOU addendums is provided below:

Components of Successful MOUs

The following table presents and describes common components in MOU agreements between EMIRGE and the LFs it may work with in the future.

|  |  |
| --- | --- |
| **Component** | **Description** |
| Objective | Statement of purpose and objectives for entering into the MOU |
| General Terms | Duration of agreement as well as termination, communication and extension procedures |
| Confidentiality | Non-disclosure agreement between parties |
| Legal liabilities | Jurisdiction, guiding law and language for enforcement of agreement, mediation process for dispute resolution and intellectual property rights. |
| Addendums/Supplements | Clarification that specific activities and support agreements will be presented in addendums to the MOU |
| Additional Provisions | Specific clauses related to local laws, donor restrictions or other provisions not included elsewhere |

*A sample MOU is available in AFE’s “Tools & Methodologies for Collaborating with Lead Firms: A Practitioner’s Manual”[[10]](#footnote-10).*

The MOU includes some standard contractual type language. There might be some awkwardness while wading through these matters with the LF as you are still building a relationship, but done correctly it can demonstrate EMIRGE’s professionalism concerning the collaboration.

Addendums to MOUs

Once an MOU has been established, addendums are written to define specific collaboration between EMIRGE and the LF. An addendum should describe the activities which will take place for the specific interventions that the LF will carry out, and lay out the responsibilities of both EMIRGE and the LF, including financial contributions, technical support, and reporting requirements. Each addendum should contain the following components:

|  |  |
| --- | --- |
| **Component** | **Description** |
| LF initiatives to be undertaken | Description of all activities, deliverables, outputs and reporting requirements covered under the addendum |
| Relationships among parties | Establish the roles and responsibilities of the LF and EMIRGE for specific activities |
| Financial Responsibilities | Detailed description of financial expectations and obligations |
| Timeframe of events/  work plan | Timeframe with clearly established milestones attributed to each party |
| Monitoring and evaluation procedures | Establishment of the EMIRGE’s right to collect and report on activities and participants. Description of reporting procedures. |
| Payment Modalities | Detailed description of cost share agreement and payment modalities |

*A sample MOU Addendum is available in AFE’s “Tools & Methodologies for Collaborating with Lead Firms: A Practitioner’s Manual” [[11]](#footnote-11).*

It takes some effort to design and communicate all of the details that are included in an MOU addendum, but it is important that it be done correctly so as to avoid any misunderstandings later in the collaboration. The LF should also be familiar with the indicators that EMIRGE may be responsible for vis-à-vis its donors, so that they understand the importance of their reporting requirements under the agreement.

Guidelines on Structuring Financial Support to LFs

The information in the table below reflects how financial support to LFs can be structured to reduce the risks of creating dependencies and promote sustainability. Principles and guidelines are presented according to categories of: 1) timing and duration of financial support; 2) cost share percentages; 3) setting limits of financial support; and 4) miscellaneous.

|  |  |
| --- | --- |
| **Component** | **Suggested Guidelines** |
| **Timing and Duration**  **of Financial Support** | * Provide financial support to get activity going and get LF excited – but only share costs for the first few interventions/activities. * Should be transitioned out over time and should have a limited duration. * Should be for a limited time to establish needed systems and capacity * Ensure that LF is taking full ownership of the initiative |
| **Cost Share Percentages** | * Keep the cost share percentage as low as possible to encourage LF ownership (while still providing incentives and helping to mitigate risks) * Put financial support into context that shows a time when subsidies will be removed (e.g. year 1 = 70% subsidy, year 2 =50%, etc.). * In its IFA, EMIRGE should stipulate that it will support “up to” a percentage (AFE usually recommends 70%) of the total cost of an activity, which gives it some flexibility of assessing proposed activities and corresponding cost shares on a case-by-case basis. |
| **Setting Limits of Financial Support** | * At the time of sharing the IFAs with potential LFs it is useful to communicate the amount of funds that it is willing to expend on financial support with LFs. The advantage of stating this up front is that the LFs understands that there is “real” money involved and it will also prevent them from proposing very high amounts of financial support that EMIRGE will not be able to support. * Some feel that by announcing a financial support amount that the LFs will automatically propose interventions for those amounts – even if they are not required. This could happen, but EMIRGE will always be in a position to scrutinize LF proposals and cut them back or decide not to fund them. |
| **Miscellaneous** | * EMIRGE and the LF can reduce financial support needed for capacity building by identifying providers of products and services that have an incentive to develop commercial relationships with the targeted LFs and the producers they buy from or sell to. These providers (input supply companies, consultants, etc.) will oftentimes provide free or “embedded” technical support, information, training services, etc. as part of their commercial relationship with the LF and producers. * Assist LF to look at leasing or alternative financing mechanisms that might be cheaper or offer more flexibility than traditional loans * Build in conditions for LFs that propose initiatives such as study tours, exposure visits, etc. to share that information and promote wider dissemination with other LFs upon their return. |

EMIRGE will need to develop guidelines and policies for providing financial support for the different kinds of initiatives proposed by LFs they are collaborating with. The guidelines of supporting a LF training activity for example will be different than those for supporting an exposure visit. EMIRGE’s financial support policies will depend on a variety of factors and will need to be tailored to specific situations – but in general they should be established in such a way as to discourage any LF that is not serious and committed to the initiative. Illustrative policies are presented below.

Illustrative Policies for Financial Support to LF Initiatives

**NEW PRODUCER TRAINING: *EMIRGE will provide financial support for****:* 70% for venue, participant meals/snacks, one non-company trainer, company transportation (first year) - for agriculture can be 50% 2nd year, 30% 3rd year / 50% cost-share of raw materials used to demonstrate product production. ***EMIRGE will not provide financial support for****:* company trainers, company staff costs (monitoring), samples of existing company products used for demonstration.

**PROCUREMENT OF NEW MACHINERY AND EQUIPMENT: *EMIRGE will provide financial support for:***transportation and installation of machinery up to $\_\_ per machine and \_\_ machines per company / training of staff operate/ maintain the machinery. ***EMIRGE will not provide financial support for:***cost of the machinery or equipment

**PRODUCT DEVELOPMENT SPECIALISTS: *EMIRGE will provide financial support for****:* 70% (airfare and fees) for designer that company has not used before / 30% for designer that company has used before. ***EMIRGE will not provide financial support for:***Local lodging and meals of designer

Negotiating and Managing Technical and Financial Support Agreements with LFs

This section presents some “lessons learned” in negotiating and managing technical and financial support agreements with Lead Firms.

1. When providing financial support to LF initiatives EMIRGE should think carefully about the potential consequences (from viewpoints of sustainability, level playing field, impact on other market actors, support market development, competition, etc.) and adopt a “do no harm” policy.
2. EMIRGE’s technical and financial support to a LF can be contingent upon a demonstrated commitment by the LF in, for example, hiring staff, making specific investments, undertaking initial activities, etc. In this manner, LFs “self-select” for collaboration with the EMIRGE program, which can enhance the chance of success and sustainability of impact. Once a LF has demonstrated such a commitment, technical and financial support from the Development Organization can be considered a “smart subsidy” as the chances of it leading to sustainable impact are greatly increased.[[12]](#footnote-12)
3. In negotiating both MOUs and related technical and financial support agreements EMIRGE should not take the responsibility to “organize producers” on behalf of the LFs as this can foster dependencies and hinder the development of sustainable relationships between LFs and producers.
4. Some LFs may require greater capacity building than others before they are able to make needed investments with producers.
5. In developing agreements, EMIRGE should be cognizant of risk management from the perspective of producers that are interacting with targeted LFs. For example, if a LF is the sole buyer of products it is purchasing from producers, then producers will face higher risks in expanding their production. In such cases, EMIRGE’s agreements with LFs can include measures to mitigate producers’ risk (such as providing support to LF to help ensure that quality inputs are provided to producers are that their end market is secure).

# Acknowledgements

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APPENDICES

Appendix 1: Illustrative Work Plan for EMIRGE Mongolia Vegetable Activities

Appendix 2: Vegetable Program Design Work Plan

Appendix 3: Interview Guide for Vegetable Market Actors

Appendix 4: Draft Invitation for Applications (IFA)

Appendix 5: Persons Interviewed in the Vegetable Value Chain

Appendix 6: Focus Group Discussion Participants

Appendix 7: Focus Group Discussion Presentation

## Appendix 1: Illustrative Work Plan for EMIRGE Mongolia Vegetable Activities

|  | | **July** | | | | **Aug** | | | | **Sept** | | | | **Oct** | | | | **Nov** | | | | **Dec** | | | | **Jan** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Lead Firm Application Process for Input Supply (MBS 1 & 2)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Complete the draft Invitation for Application (IFA) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Distribute IFAs to potential LFs that were interviewed or participated in the FGD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Broadcast a request for Expressions of Interest (EOIs) through professional networks and/or media to reach all potential LFs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Organize an orientation workshop for companies that submitted an EOI (optional) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Distribute IFAs to all potential LFs that submit an EOI |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Program Implementation Activities\* for Input Supply (MBS 1 & 2)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Receive applications from potential LFs and begin reviewing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Coordinate a time to meet with LF representatives to discuss any questions about the application |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Draft and Negotiate MOUs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Facilitate strategic/ business planning sessions as needed |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Develop impact logic for proposed LF initiatives / GC facilitation activities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Draft and Negotiate the initial MOU addendum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Begin facilitation of LF initiative(s) based on the timeline established in the MOU addendum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Lead Firm Application Process for Storage (MBS 3)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Conduct additional interviews / FGDs with storage companies to verify the constraints and challenges, as well as the challenges and incentives to procuring and selling small-scale storage equipment for vegetable farmers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Complete the draft Invitation for Application (IFA) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Distribute IFAs to potential LFs that were interviewed or participated in the FGD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Broadcast a request for Expressions of Interest (EOIs) through professional networks and/or media to reach all potential LFs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Organize an orientation workshop for companies that submitted an EOI |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Distribute IFAs to all potential LFs that submit an EOI |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Program Implementation Activities\* for Storage** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Receive applications from potential LFs and begin reviewing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Coordinate a time to meet with LF representatives to discuss any questions about the application |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Draft and Negotiate MOUs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Facilitate strategic/ business planning sessions as needed |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Develop impact logic for proposed LF initiatives / GC facilitation activities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Draft and Negotiate the initial MOU addendum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Begin facilitation of LF initiative(s) based on the timeline established in the MOU addendum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\*Due diligence should be done throughout the IFA and MOU process to ensure that any issues may be dealth with as early as possible.

## Appendix 2: Vegetable Program Design Work Plan

|  |  |
| --- | --- |
| Date | Activity |
| 9 June | Orientation and field visit planning |
| 10 -20 June | Conduct interviews, field visits, and write up interview notes |
| 23-24 June | Prepare for focus group discussions |
| 25 June | Conduct focus group discussions |
| 26 June | Consolidate findings from focus group discussions and presentation of tools and methodology for next steps |

## Appendix 3: Interview Guide for Vegetable Market Actors

**Introduction**

We represent Global Communities, an international development organization. We are conducting an assessment of the *Vegetable Value Chain* to better understand the constraints facing businesses from improving their competitiveness and the products, services, and support they provide to farmers. We are hoping that you can help us better understand the challenges you face. We will be developing a proposal for a program to support companies in developing and implementing their initiatives to address these challenges and constraints, and this information will be useful in developing this proposal. Depending on the results, firms like yours could be invited to participate.

**Contact Information**

Interviewer / Date of interview / Firm Name / Principal product or service

No. of employees / Owner (or contact) / Legal status / Address / Telephone / Email

**Market Access, Trends, and Governance**

1. What are the primary products/services that you sell?
2. What do you see as your main needs/opportunities in accessing markets?
3. To whom do you sell your products/services (large firms, small firms, wholesalers, exporters, retailers, direct to consumers, etc.)? What percentage goes to each?
4. Describe the relationships you have with these buyers (who determines what to produce, product specifications, prices, and amount purchased?). How much input do you have?
5. How do you promote and market your products/services?
6. How strong is the market for your products/services right now? Next year? What trends do you see?
7. Are some customer groups better than others in terms of sales and revenue growth? Which ones?
8. Do you ever collaborate with other firms on promotion and/or marketing?
9. Who are your major competitors?
10. Do you have a means of communicating information about your firm to others?

*(Attach any brochures, list of products, etc.)*

**Standards and Certifications**

1. What standards or certification requirements do your products need to conform to?
2. Who sets these standards and requirements?
3. Who helps you to conform to these standards and requirements?
4. Do you have any problems in this regard?

**Technology / Product Development**

1. What are your major needs/ opportunities in product design and manufacturing (or service delivery)?
2. What other products do you produce/sell? What percentage does each product represent in terms of your gross revenue?
3. What have you done recently to improve your products or services?
4. Is your current equipment or machinery an impediment to growth? Explain. If so, what kind of equipment or machinery could improve your business?
5. Is the current level of your workers training holding back growth? If so, what additional training do they need?

**Management/Organization**

1. In the area of organization and management, what are your major needs/opportunities?
2. Who does most of the work in the areas of: general management/supervision, product design, purchasing, production, shipping, accounting, marketing, repairs, etc. (owner, employees, or external)?
3. What functions do you subcontract/outsource?
4. Do you sometimes collaborate with other firms to produce and deliver customer orders?
5. Which aspects of your business do you intend to change in the next 2 years (machinery, equipment, computers, new products, marketing strategy, quality control, management system, worker skills, etc.)?
6. What management skills would you like to strengthen in order to grow your business?

**Input Supply**

1. What are your major needs/opportunities in the areas of input cost, quality, and availability?
2. Who are your *most important suppliers* and what do you buy from each?
3. Are there problems in obtaining some important inputs? Explain.
4. Have you ever purchased inputs jointly with other business? Explain.

**Finance**

1. Where do you go when you need money for your business?
2. Do you get credit from input suppliers? What are the terms?
3. Do you get production financing from your buyers? What are the terms?
4. Do you have need for additional financing at the moment? If so, what would it be used for?
5. What sources (formal or informal) have you approached for loans, and what have been the key problems, if any?
6. Other (repayment rates in the sector, risk management insurance, etc.)

**Policy/Regulation**

1. What government policies/regulations benefit your business (registrations, inspections, subsidies, incentives, etc.)?
2. What government policies/regulations are obstacles to growing your business?

**Infrastructure**

1. What are the most important infrastructure constraints affecting your business’ growth and profitability (road/transport conditions, telephone service, electric supply, crime/corruption, storage, etc.)?
2. What is your industry doing about these problems?

**Business Membership Organizations**

1. Is your industry/trade sector represented by national or local business associations? If so, please name them.
2. Are you a member? If not, why?
3. What are the primary functions and benefits of these associations?
4. What additional services should they provide?

**Final Open Ended Questions**

1. What are the major incentives you have for investing in / promoting change in the value chain?
2. What risks or constraints do you face in making these investments?
3. What do you think are the strengths of your industry locally and/or internationally?\*
4. What are the main weaknesses of your industry?
5. What do you think is the greatest challenge facing your industry today?
6. Can you name some business owners in your industry who are leaders –for example, in terms of technology, product design, quality, or marketing?
7. How did you get into your business?

*\* If success factors for international competitiveness have been pre-determined then respondents can be asked to rank their country on a scale of 1 - 5.*

## Appendix 4: Draft Invitation for Applications (IFA)

**INVITATION FOR APPLICATIONS**

**PROGRAM TO SUPPORT AGRICULTURAL INPUT SUPPLY**

**IN THE Vegetable SECTOR**

***Global Communities*** is an international development organization implementing the ***Enabling Market Integration through Rural Group Empowerment (EMIRGE) Project***. The goal of EMRIGE is to increase incomes of agriculture producers and to improve and expand their businesses in Mongolia by enabling them to overcome common constraints and access skills and opportunities to pursue market driven business objectives.

EMIRGE is inviting agricultural input supply companies in Mongolia to submit applications to develop or expand their capacity to produce and/or sell affordable and quality agricultural inputs (seed, fertilizer, herbicides, pesticides, tools, machinery, etc.) to small-scale vegetable producers in the ***Selenge, Tov, and/or Darkhan*** provinces.

Technical and financial support agreements (with cost share components ranging from 6,000,000 MNT to 10,000,000 MNT, or roughly $3,000 USD to $5,000 USD) will be negotiated to pilot specific activities with selected companies based on the selection process described below. This support must contribute to a significant investment (in cash or in-kind) that the companies will make. EMIRGE program staff will also provide technical support as needed to build the capacity of successful applicants to implement their proposed initiatives.

Applications must be submitted in accordance with the format described, and received no later than ***August 29, 2014.***

***Background***

The objective of the EMIRGE input supply development component is to promote greater access to quality agricultural inputs and better information on the use of those inputs for vegetable farmers in Mongolia. Global Communities realizes the importance of private sector companies to drive change and provide needed inputs and technical support to the producers they transact with. EMIRGE is therefore seeking to collaborate with input supply companies to support initiatives that will improve their competitiveness, expand their distribution networks, build their capacity to provide useful information and training to producers, and offer a greater variety of quality inputs adapted to the needs of producers, processors and traders.

*Illustrative Areas for Support*

Proposed activities should contribute to the company’s ability to improve, expand or develop agricultural inputs they provide to vegetable producers in the targeted areas. Examples of activities that could be supported include, **but are not limited to**, the following *(company would be responsible for organizing and managing these activities with technical and/or financial support from Global Communities):*

1. Company led training, coaching or field days to expose producers to improved use of agricultural inputs (seeds, tools, equipment, etc.) and modern cultivation techniques;
2. Organization of demonstration plots to expose producers to new varieties and/or improved use of agricultural inputs;
3. Expanding the company’s rural distribution network through the identification and training of individuals that can serve as commissioned agents;
4. Capacity building of company staff to provide improved information and training to producers and agents;
5. Training and capacity building of company distributors (commissioned agents, etc.) to enable them to better inform producers on the correct use the products that the company is offering (seeds, inputs, tools, machinery, etc.);
6. Development of posters, brochures or other materials to assist in dissemination of good use of agricultural inputs for small scale farmers;
7. Meetings with food processing companies to develop a greater understanding of their specific end market requirements *(so that input supply companies can source and/or adapt inputs accordingly);*
8. Identification and testing of new crop varieties and other agricultural input products to meet the needs of the food processing, retail, and hospitality industries in Mongolia;
9. Development of seed multiplication programs in Mongolia;
10. Developing or improving products to make them more attractive to producers (better packaging, lower cost, etc);
11. Exposure visits in Mongolia or other countries to identify new sources of seed, tools, equipment, or other inputs; and
12. Strategic planning exercises/ development of business plans to expand distribution networks.

This list is non-exhaustive. It is simply to provide examples of company initiatives that could be supported by EMIRGE. Any combination of these activities is encouraged. However, all supported activities must show how they will create sustainable impact for the producers that the company sells to, and increase the ability of producers to supply buyers of these products in Mongolia.

***EMIRGE cost share funds cannot be used for:***

* Working capital (day to day company operations for salaries, rent, purchases, etc)
* Direct payment or subsidy to producers
* Fixed assets (tools, equipment, etc.)

***General Criteria:***

Criteria for input supply companies eligible for this program include:

* They must currently be selling products (either directly or through their distributors) to at least 100 producers in Mongolia.
* They must have been in operation for at least two years.
* They must be selling products of acceptable quality that respond to the needs of farmers.
* They must have policies in place to ensure that no dangerous or illegal products are sold to producers.
* They must have commercial interest and incentives to invest in the producers they sell to through training, new products, field days and/or other forms of support.
* Their investment in the proposed initiative must be at least 30% of the cost of the initiative.
* Activities must target producers in the Selenge, Tov, and Darkhan provinces
* ***At least 60% of proposed activities/ budget should be for activities where the company develops/improves the direct support it provides to producers (training, introduction of new products, technologies, quality management, etc.)***
* Program is not eligible for NGOs, government agencies, consulting firms, or associations.

After review of the applications, EMIRGE may determine that some of the proposed activities (such as exposure visits) might be best pursued as “cross-company” interventions, with several agricultural input supply companies participating. This could have the effect of reducing costs and promoting lateral learning among the participating companies. This assessment (as well as discussions with the Applicants) will take place once Applicants have submitted their applications.

***Expected Results***

While it is expected that participating companies will benefit from these activities, it is also expected that activities supported under this program will benefit the producers the companies are selling to in terms of better information, skills upgrading, improved productivity, enhanced revenues, etc. as well as improving their ability to supply traders, food processing and export companies in Mongolia.

#### Preparation of Applications

Support from EMIRGE may be given to several different companies. All applications will be evaluated based on the criteria in the table below and the general criteria given above. ***All applicants that meet the criteria will be considered for financial support.*** Applicants are encouraged to discuss their ideas and request advice from Global Communities in the preparation of their applications.

**INSTRUCTIONS AND FORMAT**

|  |
| --- |
| **Cover Page**  *Name and Address of Applicant (address, phone, fax, email)*  *Date of Submission*  *Lead Person to Contact*  *Reference: EMIRGE Input Supply Sector Application* |
| **Activities and Impact (up to 2 pages)**:  *Clear description of proposed activities including how they fit into the company’s business strategy, how they will contribute to improved competitiveness, and how they will promote greater access to quality inputs for producers.* |
| **Personnel (up to 1/2 page):**  *Describe the name and qualifications of the people who will be responsible for implementing the activities.* |
| **Experience (up to 1/2 page):**  *Brief description of past or current initiatives that company has conducted similar to those proposed, or why the company feels it is qualified to successfully conduct the proposed activities.* |
| **Sustainability (up to ½ page):**  *A clear description of how the activities will result in increased and sustainable commercial relationships between the company, its distributors, and producers, and how the company will be able to continue these commercial relationships and provide ongoing support to the producers once the program ends.* |

Applications will be accepted in Mongolian (though English is preferred) and must be no more than four pages in length (not including the budget or budget notes). EMIRGE will select applicants that meet criteria by September 1st, 2014. At that time, more detailed activity planning will take place between EMIRGE and the applicants. This planning will include:

* Detailed discussions and agreement on strategy, budget and timing for different activities.
* Discussions on how technical support from EMIRGE staff and consultants can be provided to support the agreed upon activities.
* Discussions on how combined technical support or “cross-company activities” might be organized with several Companies.

Activities will begin in September 2014. All supported initiatives must be completed by September 30, 2015.

Please submit an electronic copy of the application by August 29, 2014 to the KMSS representative at email: ndashtseren@mn.globalcommunities.org. Please include the name of the lead contact person who will be involved with the application process as well as the telephone and email contact information.

Conditions: **Issuance of this request for application in no way constitutes a commitment by Global Communities to execute any agreement or to pay any costs incurred by any applicant in submitting an application.**

Please note that Global Communities **will fully respect the confidentiality** of all companies involved in the program. A joint memorandum of understanding between Global Communities and the Company will be developed, with detailed activities clearly defining the respective responsibilities, roles, and obligations of each party. Successful applicants must be willing to share information with Global Communities regarding their sales to (or purchases from) targeted producers. Global Communities (on a sample basis) will conduct interviews with these producers to gather information on impact and to monitor progress.

**Instructions for Completing the Budget**

Each applicant will prepare a budget using the format below. Please provide as much detail as possible in the line item descriptions and budget notes. If possible (though not mandatory) applicant should prepare and send this budget as an additional file in Microsoft Excel format. ***Applicant must contribute at least 30% to proposed costs***.

|  | **Line Item** | **Budget Notes**  **(describes line item in more detail)** | **Cost/ Unit** | **Days/ Unit** | **People/ Number** | **Total Cost** | **Company Investment** | **EMIRGE cost share** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | ***EMIRGE* cost share (50-70%)** |  |  |  |  |  |  |  |
|  | **Company cost share (30-50%)** |  |  |  |  |  |  |  |

***\* Please contact EMIRGE for any assistance or questions you may have.***

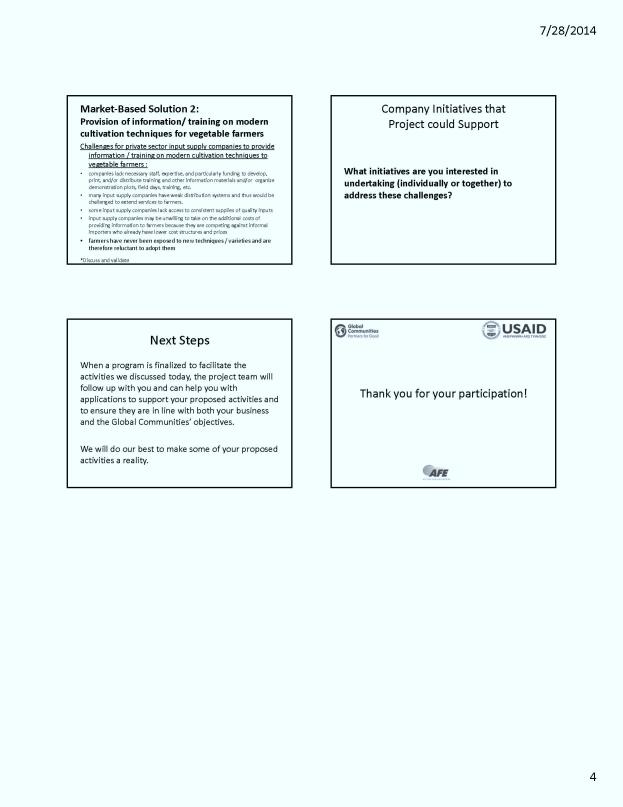
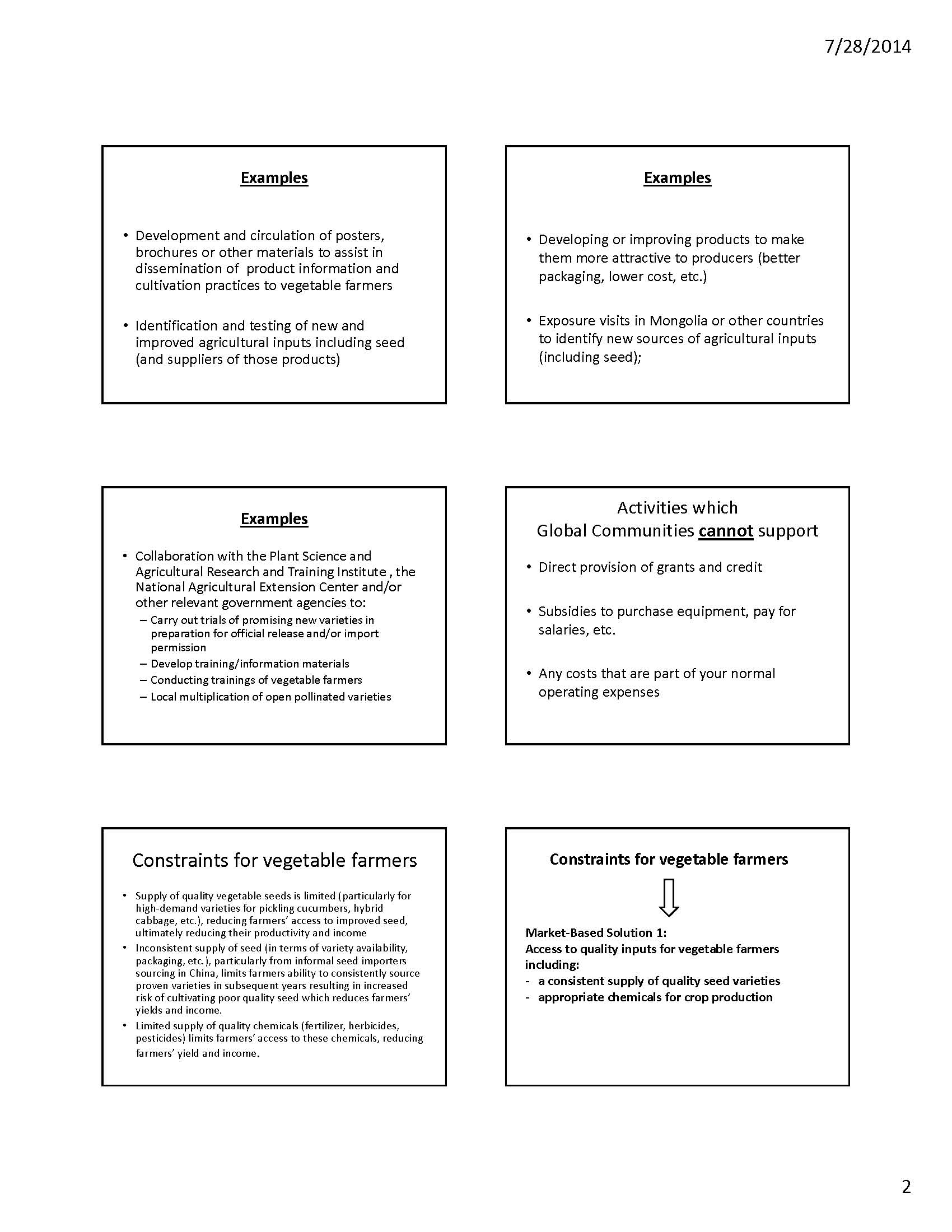
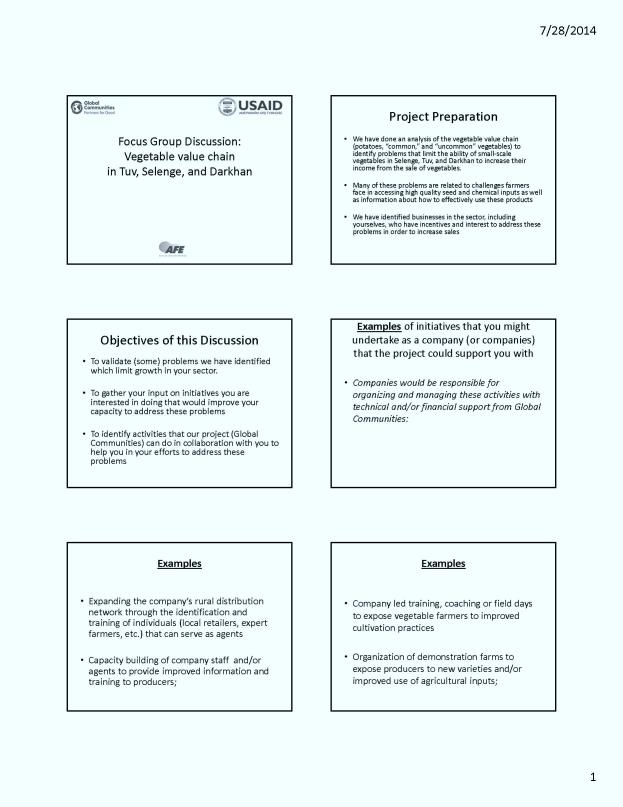
## Appendix 5: Persons Interviewed in the Vegetable Value Chain

|  | **Time** | **Entity name** | **Description** | **Contact name and title** | **phone, email, and address:** |
| --- | --- | --- | --- | --- | --- |
|  | ***Government/public sector:*** | | | | |
| 1 | 19/6/2014, 9.30AM-10:30AM | Ministry of Industry and Agriculture of Mongolia | Government office | Mr.Renchinsengee. Director general, Department of Coordination for Crop Production Policy Implementation | 976-51-262713, mobile 976-99092390, |
| 2 | 19/6/2014, 14.00PM-15.00PM | Ministry of Education Science of Mongolia | Government office | Mr.Lhagvadorj., Senior specialist, Department for Food production policy implementation | 976-93060039 |
| 3 | 20/6/2014, 9.00AM-10.30PM | Ministry of Industry and Agriculture of Mongolia, National Agricultural Extension Center | Government office | Mr., Duursah.L Director, Honorary doctor | 976-70118086, mobile 976-99105144 |
| 4 | 17/6/2014, 9:30AM | Plant science research agriculture institute in Darhan-Uul province | Training, seeds production and multiplication | Narandelger, head of vegetables sector | 88014155 |
| 5 | 23/6/2014, 10:00AM-11:00AM | Professional Inspection Agency | Government office | Itgel.Ts Senior specialist | 99811734 |
|  | ***Retailers:*** | | | | |
| 6 | 11/6/2014, 12.30PM-13.30PM | Minii supermarket | Large supermarket chain | Munhtsetseg-manager sales | 976-91019956 |
| 7 | 10/6/2014, 13:00-14:30 | Nomin supermarket | Large supermarket chain | Seller- Boloroo | 9181-3445 |
| 8 | 10/6/2014, 15:00-17:00 | Max supermarket | Large supermarket chain | Deputy CEO of Food-Gansukh.J | 8808-1875 |
| 9 | 10/6/2014, 10:00-12:00 | Nomads | Large restaurant chain | Oyutungalag-Chairman supply | 8800-7851 |
| 10 | 17/6/2014, 13:00PM | Darhan market | Seeds, pesticide, seedlings | retailer, personal women |  |
| 11 | 17/6/2014, 13:00PM | Darhan market | Early harvest (green onion, bok choy) | retailer, personal women |  |
| 12 | 23/6/201, 11:30AM-12:00AM | UB, Amgalan zah | Common vegetables | retailer, personal women |  |
|  | ***Vegetables processors:*** | | | | |
| 13 | 10/6/2014, 15.00PM-17.00 PM | *Mish-Mash LLC* | *Vegetables processor in Mongolia: pickling* | *Ms.Burmaa, director* | *976-99044040* |
| 14 | 10/6/2014, 9.00AM-10.30AM | *ERMA BB LLC* | *Small scale processor in Mongolia: Canned vegetable, Jam, Juice* | *Mrs.Serjmaa.Kh, General director* | *mobile 976-96650617, 99872787 serjmaa\_0306@apu* |
|  | ***Wholesalers:*** | | | | |
| 15 | 10/6/2014, 10.00AM-12.30 PM | *Wholesaler in Bars* | *Importer, exporter and producer* | *Tsetsegsuren* | *mobile 976-98777736* |
| 16 | 10/6/2014, 12.30 PM-13.30 PM | *Wholesaler in Bars* | *Importer, exporter* | *Baigalimaa* | *mobile 976-99015196* |
|  | ***Farmers:*** | | | | |
| 17 | 6/14/2014 16:00 | Farmer | Farmer/ member of Zuunharaa Baylag Cooperation | Altantuya | 9671-7275 |
| 18 | 6/14/2014 17:30 | Farmer | Farmer/ Leader of Zuunharaa Baylag Cooperation | Bertsetseg | 9595-6399 |
| 19 | 6/15/2015 9:00 | Farmer | Farmer/member of the production group Enhtaivanii anduud | Ganbold | 9571-9449 |
| 20 | 6/15/2014 11:00 | Farmer | Farmer/ member of Zuunharaa Baylag Cooperation | Erdenee | 9981-0958 |
| 21 | 6/15/2014 15:00 | Farmer | Farmer/ member of Urgats Erdene production group | Erdenebaatar | 9900-0485, 99390589 |
| 22 | 6/16/2014 11:00 | Farmer | Farmer/ Leader of Buteelch production group | Oyunbileg | 9989-7720 |
| 23 | 6/16/2014 13:00 | Farmer | Farmer/ Leader of Organic Bal production group | Batjargal | 9585-7084 |
| 24 | 6/16/2014 15:00 | Farmer | Farmer/ Member of Buteelch production group | Oyunbileg | 9998-6189 |
| 25 | 6/17/2014 11:00 | Farmer | Farmer/ Member of Zam production group | Tsetsegmaa | 9997-6851 |
| 26 | 14/6/2014, 11:30AM | Farmer | Farmer/member of the production group Enhtaivanii anduud | Barbayar | 99390319 |
| 27 | 14/6/2014, 14:00PM | Farmer | Farmer/member of the production group Enhtaivanii anduud | Erdenesuvd | 992470947 |
| 28 | 15/6/2014, 9:30AM | Farmer | Farmer/member of the production group Enhtaivanii anduud | Dashnyam | 99681047 |
| 29 | 15/6/2014, 11:00AM | Farmer | Farmer/member of the production group Buman but | Badralhuu | 99814708 |
| 30 | 16/6/2014, 10:00AM | Farmer | Farmer/member of the production group Bayantal | Erdenechimeg | 99925765 |
| 31 | 16/6/2014, 11:00AM | Farmer | Farmer/member of the production group Bayantal | Sumya |  |
|  | ***Input suppliers*** | | | | |
| 32 | 11/6/2014, 9.00AM-12.00PM | Arvinshimt gazar LLC | Seeds, seedlings, equipment | Buyandelger, director | mobile 976-99087018 |
| 33 | 12/6/2014, 12.30PM-13.30PM | Mongolian farmers association for rural development | Seeds collection, production and distribution, training | Turmandah.T executive director | mobile 976-99277280, turoo@mfard.mn |
| 34 | 11/6/2014, 16.30PM-18.00PM | Vegetables seeds LLC | Seeds, seedlings, equipment | Selenge, director | mobile 976-99166825 |
| 35 | 16/6/2014, 14:00PM | Distributor branch of Mongolian farmers association for rural development | Seeds supplier in Orhon soum | Batmyadag | 99066386 |
| 36 | 16/62014, 15:00PM | Potato seeds production | Potato seeds production in Orhon soum | Nyamdavaa |  |
| 37 | 15/6/2014, 16:40PM | Noyon-Uul LLC | He has cold storage for 2000 MT | Davgadorj | 99117011 |
| 38 | 19/6/2014, 15:00 PM | Munh hogoon tal LLC | Equipment, seeds, green house | Shop of the company | 70158787 |
|  | **Traders** | | | | |
| 39 | 12/6/2014, 10.00AM-11.30AM | Middleman | To get various vegetables from farmers | Altantsatsaral | *976-96464466* |
| 40 | 15/6/2014, 15.00PM-17.30PM | Middleman | To get various vegetables from farmers | Dambii-Yadam | 976-88605039 |
| 41 | 13/6/2014, 14:00-15:30PM | Dultsen LLC | Vegetable growers and supplier to large supermarket and large restaurant | Director General-lkhagvavanchig, Horolgaraw | 9190-4577 |
|  | **Services** | | | | |
| 42 | 16/6/2014, 16:30PM | Service provider in Orhon soum | Soil cultivation, planting hoeing, harvesting | Amgaa | 99406303 |
| 43 | 20/6/2014, 9.00AM | HAS leasing LLC | leasing | Enhjin, marketing specialist | 99197990 |

## Appendix 6: Input Supply Focus Group Discussion Participants

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Entity name** | **Description** | **Name and Title** | **Contact Information** |
| 1 | Mish-Mash LLC | Vegetables processor in Mongolia: pickling | Ms. Burmaa, director | 976-99044040 |
| 2 | Mongolian farmers association for rural development | Seeds collection, production and distribution, training | Nergui. M, manager | 976-99812157 |
| 3 | Evergreen Land Co. Ltd | equipment, seeds, green house | Davaanyam. D, director | 976-99113278 |
| 4 | Tumen suih LLC | Green house | Oyunchimeg. Ya | 976-99131692 |
| 5 | Plant Protection Research Institute | Research | Myagmar.Ch | 976-99181087 |

## Appendix 7: Focus Group Discussion Presentations

***Input Supply FGD Slides*** *(slides prepared for the FGDs with processors and storage companies are also available from the GC Mongolia Team)*

1. WHO; *Mongolian STEPS Survey on the Prevalence of Noncommunicable Disease and Injury Risk Factors – 2009*; available at: <http://www.who.int/chp/steps/2009_STEPS_Report_Mongolia.pdf> [↑](#footnote-ref-1)
2. Interview with Munhtsetseg at Minii Supermarket [↑](#footnote-ref-2)
3. Source: historic exchange rate data available at [www.xe.com](http://www.xe.com) [↑](#footnote-ref-3)
4. <http://www.mongolbank.mn/eng/dblistcpi.aspx?vYear=1&vMonth=0> [↑](#footnote-ref-4)
5. Interview with Baigalimaa at the Bars Wholesale market [↑](#footnote-ref-5)
6. *Anatomy of the Current Economic Crisis*; available at: <http://blogs.ubc.ca/mongolia/2013/anatomy-of-economics-crisis-2013/> [↑](#footnote-ref-6)
7. Government providers are in italics [↑](#footnote-ref-7)
8. For more question guides and other tools for supporting support companies in organizing outgrowing operations, please refer to *A Practitioner’s Manual: Facilitating the Development of Outgrower Operations* available at: <http://www.microlinks.org/library/practitioners-manual-facilitating-development-outgrower-operations> [↑](#footnote-ref-8)
9. A cursory review of [www.alibaba.com](http://www.alibaba.com) conducted by AFE using the search term “small scale vegetable cold storage” identified a number of relatively inexpensive small-scale vegetable cold-storage options which may be appropriate for the Mongolian context (<http://www.alibaba.com/trade/search?SearchText=small-scale+vegetable+cold+storage>). [↑](#footnote-ref-9)
10. ““Tools & Methodologies for Collaborating with Lead Firms: A Practitioner’s Manual”. 2014. Action For Enterprise. <http://www.actionforenterprise.org/lf-manual.pdf> [↑](#footnote-ref-10)
11. ““Tools & Methodologies for Collaborating with Lead Firms: A Practitioner’s Manual”. 2014. Action For Enterprise. <http://www.actionforenterprise.org/lf-manual.pdf> [↑](#footnote-ref-11)
12. *Smart subsidies can be defined as those that encourage LFs to do something they probably would not be doing on their own, at least not right away because they see it as too risky. DO value is in buying down that risk to a reasonable level with a reasonable degree of subsidy without doing the work for them or creating dependency on the DO to drive the process.* [↑](#footnote-ref-12)