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# TRIP REPORT

Feb 24 – March 2, 2016

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## PROGRESS TO DATE

The initial feasibility study had two objectives:

- Determine where (which activities/regions/etc.) the development impacts of insurance-based risk management strategies would be maximized; and,
- Assess whether there is appropriate and available data that is correlated with the identified agricultural outcomes such that it can be used to create an effective index for an insurance product.

In Stage 1 of the feasibility study we looked across a broad variety of commodities and areas to create a short list of those commodities/areas where insurance can have large impacts by crowding in new investment and prudential risk-taking by small-scale farms. Based on our initial work under this activity, we determined that insurance for rice in the Terai had the greatest potential, based on our search criteria.

In Stage 2, we closely examined rice in the Terai (Far-west, Mid-west, West Terai) to determine whether an effective index insurance contract can be designed. Unfortunately, our work to date on contract design and contract quality measurement returns a pessimistic confusion on the feasibility of an effective index insurance contract using an external measure. Based on prior success in Tanzania, we worked with a leading geospatial software engineering firm to use high-resolution satellite information, coupled with modeling approaches, to try to correlate these data with yields. However, our results indicated that the satellite measure would underestimate farmer losses and so would not be a feasible index.

Using data we collected in the Terai, we tested the feasibility of an area yield-based insurance product. This should be best able to predict farmer outcomes, as it is based on actual yield information rather than an outside indicator (such as rainfall or satellite-based measures). Based on this analysis, there is potential for a moderately effective insurance contract using area yield. Average area yield would clearly be highly correlated with individual farmer losses and therefore have high predictive power, but the data needed for the contract would be expensive to collect.

BASIS/I4 recommends implementation of a small pilot study across 250 multi-ward insurance zones (125 control zones and 125 treatment zones) to assess both the implementation costs and the

development impacts of an area yield contract. Scaling up an area yield approach would only be worthwhile if its social and economic impacts are large enough to justify the costs.

## **TRIP OBJECTIVES**

The BASIS/I4 team traveled to Nepal to disseminate and discuss the findings from the final report of the Index Insurance Feasibility Study, and to discuss appropriate next steps with relevant stakeholders.

In particular, before proceeding with the planning of an area yield-based index insurance pilot study, we wanted to assess the support and interest of the government of Nepal and the private insurance companies in Nepal. Cooperation and collaboration with these stakeholders is essential to the success or any pilot study, as well as for any scaling of the intervention, if it is found to be successful.

## **MEETINGS ORGANIZED**

In order to disseminate the results of the first phase of the research, as well as to both refine the proposed next steps and gain feedback, the BASIS team met with government and insurance representatives. These meetings provided opportunity to disseminate our conclusions from the initial study and to explain the implications of these results. The discussion then focused on refining proposed next steps, and assessing whether or not there was adequate support to move forward.

### **Government**

Before moving ahead with any additional research, BASIS and USAID determined it was necessary to first make sure that there was government interest in such research. BASIS and USAID met with government representatives at the Ministry of Agricultural Development and the Insurance Board to 1) explain the results from the initial feasibility study, 2) present proposed next steps, and 3) get feedback and guidance on how to proceed.

#### *Ministry of Agricultural Development (MoAD):*

The Government of Nepal has increased their contributions for the subsidy of agricultural insurance to 75 percent of the cost of the premium (from an original 50 percent). Despite this increase, sales remain low. Despite an original intention to offer the subsidies for a period ending after five years, now – three years into the effort – there appears to be no clear end date.

To date the crop insurance offered has only covered the cost of inputs, not actual production. The government, they indicated, is committed to trying to make alternative insurance options work, but also said that it has been a challenge for them because they lack the expertise. Based on this, they are interested in and supportive of an area-yield based insurance pilot, and are willing to cooperate and to coordinate with USAID on this.

### *Insurance Board*

The Insurance Board, the regulatory authority over insurance in Nepal, reiterated the fact that only input cost-based insurance has been offered to date for agriculture. In an effort to increase the insurance supply and to compel the private industry to begin to offer agricultural insurance, they have divided the 75 districts of Nepal amongst the 17 insurance companies at random.

After explaining the myriad options that were considered and why these other options were not feasible, the Insurance Board seemed positive and supportive of the idea of a pilot of an index-based insurance product. They indicated that they would not need to review/approve an index-based insurance contract for the purpose of this pilot study.

### **Insurance Companies**

One of the top concerns of both the government of Nepal and USAID (and others in the donor community) is that insurance companies in Nepal do not want to participate in agricultural insurance, especially crop insurance. To that end, we spoke the three of the top insurance companies in Nepal to better understand their perspective on the issues, especially with regard to both constraints/challenges and opportunities.

#### *NLG Insurance*

The focus of the discussion with NLG insurance was that the insurance sector is still skeptical that there will be a market for agricultural insurance. The land, in their opinion, is too small and too far apart, and it would be difficult for the private sector to provide service to this sector without land consolidation and demand aggregation. NLG made the comparison to micro-finance; banks were not designed to do microloans, and for that sector it took the emergence of specific microfinance institutions to make the change. NLG suggested that – from their perspective – it might take a new institution to begin to offer micro-level agricultural loans. They also suggested the potential for the 17 insurance companies to pool risk so that no single company needs to take on too much risk of entering the market alone.

#### *Shikhar Insurance Company*

The representatives of Shikhar Insurance Company perceived participation in agricultural insurance to be part of their social responsibility. From their perspective, something has to be done to make a beginning. In their cattle insurance program, they are having problems with moral hazard due to high monitoring costs, but they don't feel that they can do anything about it because of the political environment.

#### *Siddhartha Insurance Company*

Siddhartha Insurance Company is already engaging in crop insurance to a small degree, with about 1 million rupees in premiums collected, and are already engaged in local-level awareness and marketing campaigns. They view information and understanding of new technologies as their biggest barriers to the scaling up of agricultural insurance. While they do not perceive agricultural insurance as something that must be profitable (as it can be balanced with other, more profitable parts of their portfolio), they do not want to lose money by offering agricultural insurance, and they are concerned about the high administrative costs of micro-level insurance, and are interested in hearing any opportunities that there might be to reduce these costs.

## RECOMMENDATIONS

The BASIS/I4 team recommended that USAID and partners pursue a pilot study of an area yield index insurance product in the eight districts surveyed in the feasibility study, for rice farmers in the Terai. More specifically, we recommend the following:

1. Work with MoAD to encourage the application of “smart subsidies” that are budget neutral and develop a marketplace for agricultural insurance.
2. Further develop and test a new model for the aggregation of insurance demand and payout distribution, the “I4 VISA Model”.

Combined, the BASIS/I4 team believes these actions will help develop a market for crop insurance in Nepal.

### *An Alternative Subsidy Scheme*

BASIS/I4 recommends an alternative, budget-neutral subsidy scheme that 1) provides better risk protection to farmers and 2) creates and promotes the market for agricultural insurance. Instead of partially subsidizing every agricultural insurance product, we recommend a 100% subsidy on the insurance premium for Catastrophic Risk Protection and a partial subsidy rate for the supplementary protection. We recommend a 100 percent premium subsidy for catastrophic insurance, and a 60 percent premium subsidy for additional cost for the full contract.

Even with an anticipated insurance company mark-up, the cost per unit of catastrophic risk coverage is still quite low, which makes this a cost-neutral option compared to the governments current subsidization at a 75% level (assuming the same uptake rates). This 100% coverage of catastrophic risk would be implemented through the innovative new “I4 VISA Model”.

### *Village Insurance-Savings Associations (VISA)*

The BASIS/I4 team also proposes an innovative approach to risk management and resilience for vulnerable smallholder agriculturalists: the Village Insurance-Savings Association (VISA). Inspired by the microcredit sector’s Rotating Savings and Credit Associations (ROSCAs), and

their success in developing a market and inspiring small-scale farmer investments, VISAs have the potential to spur farmer investment in insurance and to aggregate insurance sales to make sale and distribution of contracts both logistically feasible and financially profitable for the insurance sector.

Similar to ROSCAs, VISAs would meet regularly and contribute a small, agreed upon set amount each meeting to gradually pool enough savings to purchase the insurance. These meetings could begin shortly after harvest, and would continue until sufficient funds have been saved for the purchase of insurance.

When all farmers have reached the target amount to purchase the insurance, the purchase is escalated to the local insurance agent. The local office supervisor coordinates with the VISA Animator to transfer the money for purchase of the aggregated VISA insurance contracts. The local offices aggregate the sales from across the VISAs in their zone, and pass on to the Insurance Entity, which will then coordinate with the government for application of relevant insurance subsidies.

Also, similar to the way the formation of ROSCAs opened the door to micro-loans, this innovative I4-VISA methodology allows demand for insurance to be aggregated, enabling the private sector micro-insurance providers to sell products in remote and difficult-to-reach areas that previously did not have access to these risk management tools. It also enables the private sector to offer products for very small parcels of land that would otherwise not be reasonably insurable.

When contracts are issued, and when payouts are issued, the process reverses and works back down the organizational chain from the Insurance Entity back to the individual farmer. Once the premiums have been collected and channeled upward (and the subsidies have been contributed from the government), the head office will issue contracts to their local offices, which will then distribute accordingly to the VISAs in their sales zone. The village animator will distribute to their group members.

In the case a payment is triggered by the area-yield index, payouts will be distributed the same way. In this way, there is no need for insurance sales agents to go farmer-to-farmer, either for insurance sales, claims verifications, or payout distribution. This helps maintain a reasonable cost of insurance.

## **NEXT STEPS**

The BASIS/I4 team will continue to work together with USAID, the Nepalese government and potential private sector partners in Nepal to finalize the design of the intervention for a pilot study.

Critical next steps include:

- *Acquire commitment from the MoAD on the revised application of subsidies.*  
We cannot finalize the study design, the products, or the partners until this step has been completed. Therefore, this step must occur as soon as possible and prior to most of the other steps that need to be taken. USAID’s assistance in brokering this step will be essential.
- *Determine insurance company partner(s).*  
We will have to determine both the criteria for selection of insurance partner(s) and move forward to identify and commit to an appropriate partner for this pilot.
- *Define “Insurance Zones”.*  
BASIS/I4 researchers will further examine the data and develop the “insurance zones” that will be used for the area yield-based index insurance product design.
- *Collect additional data for insurance calibration.*  
At the end of this year’s rice growing season (approximately September 2016), BASIS/I4 will conduct an area yield survey to further calibrate the index design and test the survey instrument.
- *Design insurance products (including trigger, payout, and pricing).*  
This will be done at the end of 2016 or early 2017, after the area yield survey data has become available and all partners have committed to the project.