

# **Enhancing access to weather index agricultural insurance in Burkina Faso: a new marketing approach**

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**Formative evaluation report**

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## About this formative study

This formative evaluation was submitted in partial fulfilment of the requirements of grant TW13.I.1028 awarded under Agricultural Insurance Evidence Programme. This version of the report is technically sound and 3ie is making it available to the public in this final report version as it was received. No further work has been done.

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As of June 2020, versions of this paper are also available on [World Development](#), [Science Direct](#) and [Department of Economics Oklahoma State University](#).

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## **Executive summary**

- The study explored the marketability of a rainfall index insurance product targeted at urban migrants in Burkina Faso with rural relatives engaged in farming.
- The study involved a census of 978 households in 20 villages close to Ouagadougou, a survey of a random sample 400 rural households from these villages, tracking 124 migrants from these households presently living in Ouagadougou and marketing the insurance product to these migrants.
- The rural census revealed that 56% of households in the sample villages had one or more migrants in the capital city Ouagadougou, and 70% of them had previously received transfers from these relatives. These figures imply that a rainfall index insurance product targeted at Ougadougou-based migrants can have significant reach in rural areas.
- 22% of migrants surveyed subscribed to the insurance policy marketed by Planet Guarantee. Probability of uptake was higher by 17-22% for migrants randomly offered direct indemnity payments to the rural relative as opposed to payments being made to the subscriber.
- Take-up of the insurance policy was higher (by 19.5%) when the migrant indicated at least one shock, covered by the insurance policy, had been experienced by the rural relative. By contrast, take-up was not responsive to the rural relatives' own report of shocks.

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## 1. Introduction

Based on a study of the micro-insurance landscape in Africa conducted by the International Labor Organization in 2009, Matul et al. (2010) estimated that there are approximately 700 million working poor and vulnerable non-poor on the continent, with an annual income of 500 billion USD, who can potentially benefit from formal insurance. However, less than 3% of this population currently uses micro-insurance products.

In recent years, microfinance institutions have experimented with micro-insurance products for rural farmers, and in particular rainfall index insurance, in different parts of the world. But the uptake of these products has generally been very low (Cole et al. 2013). It is evident that there is a mismatch between the type of formal insurance products that microfinance institutions are currently providing and the financial literacy of poor rural farmers. Academic researchers have proposed a number of possible explanations for this phenomenon including high opportunity cost of insurance premiums for poor farmers and their reliance on informal risk-sharing networks (e.g. Binswanger-Mkhize 2013, Mobarak and Rosenzweig 2012).

The study is motivated by the well-established evidence that rural to urban migration is often used as risk coping/management strategy (e.g., Lucas, 1997; Stark and Lucas, 1988). We hypothesize that the demand for weather index insurance will increase if the product is marketed through urban migrants who could purchase it to cover their relatives who live in the countryside. Provided that the insurance is sold at an actuarially fair price, both the migrants and the farmers can significantly protect their consumption against negative income shocks related to weather variations.

The intervention is based on an existing rainfall index insurance product developed by the organisation PlaNet Guarantee for small-scale rural farmers in Burkina Faso. The intervention involved marketing the product to urban migrants in Ouagadougou who originate from villages and have relatives engaged in farming. More precisely, urban migrants were given the opportunity to purchase insurance for agricultural plots farmed by their rural relatives, with the contract specifying indemnity payments to be paid either to the subscriber or directly to their rural relative.

This intervention is based on three main assessments: (1) that rainfall insurance coverage is beneficial (Karlan et al., 2012); (2) that the uptake of rainfall index insurance has generally been very low in low and middle income countries (Cole et al., 2013); and (3) that rural households in developing countries often rely upon assistance from close relatives among urban migrants to cope with adverse weather-related shocks (e.g. Kazianga, 2006; Mobarak and Rosenzweig, 2012).

The overall aim of the study is to test the hypothesis that offering the insurance to urban migrants – who provide assistance to their rural relatives in times of adverse weather-shocks that can affect agricultural output -- can increase the outreach of rainfall insurance, reduce uncertainty for both rural farmers and urban migrants and consequently improve productivity in rural small-scale agriculture and in economic activities among urban migrants. Phase 1 of the study was designed as a proof-of-concept exercise to evaluate some key questions related to the overall hypothesis, and to gather feedback from potential subscribers that can be used to improve the design of the product.

A recurring problem with weather insurance – and in particular rainfall index insurance – aimed at rural farmers in developing countries is its low uptake, which has been attributed to cash constraints, basis risk, lack of understanding of the product (i.e. financial literacy), and lack of trust in the insurance provider (literature reviewed in the next section). The rationale for marketing the insurance product to urban migrants is to circumvent some of these problems based on the idea that (i) urban migrants are likely to have better cash flow than their rural relatives; (ii) urban migrants typically have more experience with financial products than their rural relatives, which should improve understanding of the product and trust in the provider; (iii) rural farmers would gain some exposure to formal insurance via urban relatives who subscribe, which can improve understanding, trust, and eventually uptake of rainfall index insurance by rural farmers themselves; (iv) the intervention has the potential to affect a large group of people at a small implementation cost given that urban migrants are concentrated in a few large cities while their relatives engaged in farming are scattered across rural areas.

In our study, rainfall index insurance was offered to potential urban subscribers at market prices. Therefore, if the results show significant uptake at a low marketing cost, the evidence can be used to draw other private insurers to the market, thus expanding the supply of rainfall index insurance.

## 2. Context

The evaluation will be carried out with small-holder farmers in rural Burkina Faso and migrants from these households presently living in urban areas. The majority of farmers are engaged in rainfed subsistence agriculture. The rainfall occurs during a single wet season lasting three to five months (May to September) and is highly variable. Consequently, the majority of rural households are exposed to weather-related risks. According to data from the Burkinabe Ministry of Agriculture survey of 2015, nearly 78% of households cope with adverse shocks through consumption of own stocks. By contrast, less than 2% rely on formal insurance.

The wider context for the study is that there are approximately 700 million working poor and vulnerable non-poor in Africa, who can potentially benefit from formal insurance. However, less than 3% of this population currently uses micro-insurance products. (Matul et al. 2010).

## 3. Intervention Description and the Theory of Change

The intervention is based on an existing rainfall index insurance product developed by the organisation PlaNet Guarantee for small-scale rural farmers in Burkina Faso. Subscribers can insure themselves against rainfall shortages in a specified location within the organisation's coverage area. Rainfall is measured using satellite data at a resolution of 10 square kilometers, and payouts are a function of rainfall realisation at three stages of plant growth (germination, second-stage growth, fruit and flowering). Planet Guarantee's current subscription rate in rural areas is between 20 and 35% with marketing costs between 20,000 FCFA and 40,000 FCFA per subscription. The intervention involved marketing the product to urban migrants in Ouagadougou who originate from villages and have relatives engaged in farming. More precisely, urban migrants were given the opportunity to purchase insurance for agricultural plots farmed

by their rural relatives, with the contract specifying indemnity payments to be paid either to the subscriber or directly to their rural relative.

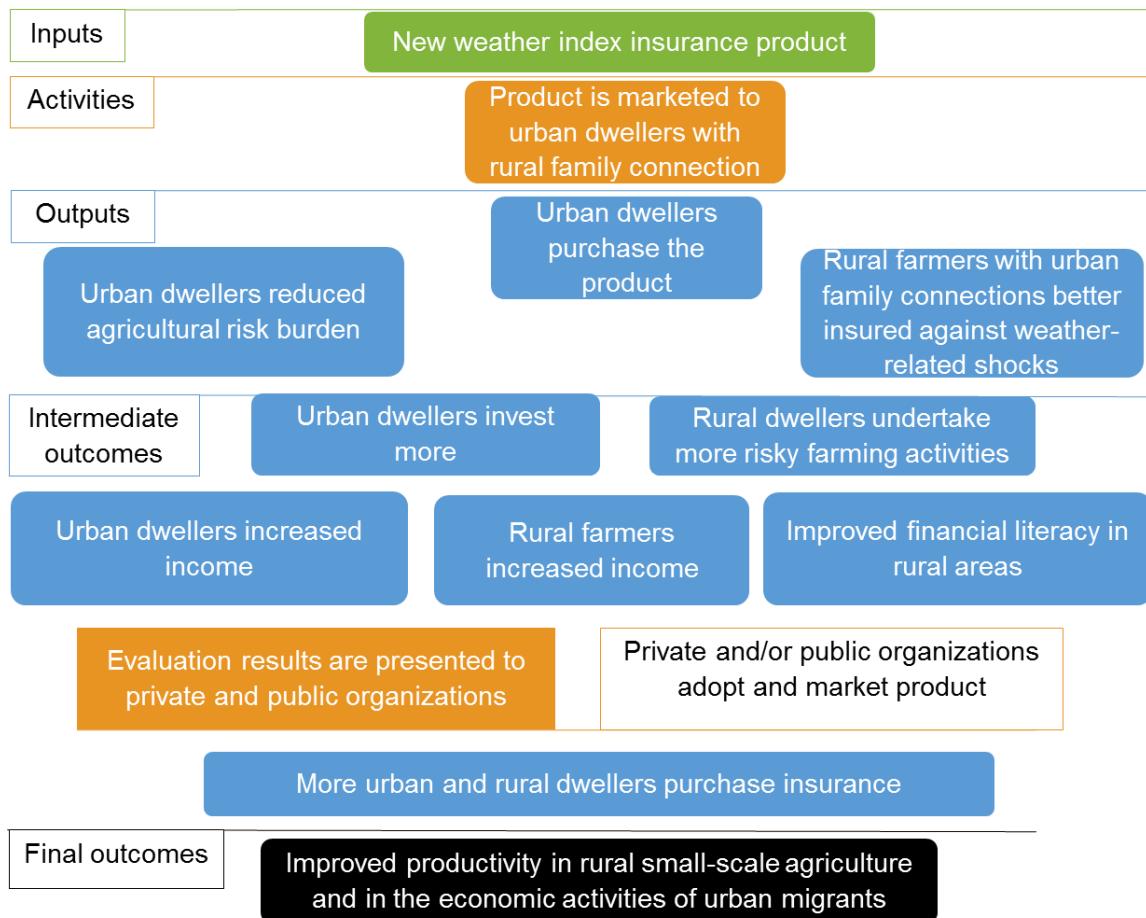
The study is motivated first by the well-established evidence that rural to urban migration is often used as risk coping/management strategy (e.g., Lucas, 1997; Stark and Lucas, 1988). We hypothesize that the demand for weather index insurance will increase if the product is marketed through urban migrants who could purchase it to cover their relatives who live in the countryside. Provided that the insurance is sold at an actuarially fair price, both the migrants and the farmers can significantly protect their consumption against negative income shocks related to weather variations.

Second, rural households in developing countries often rely upon assistance from close relatives among urban migrants to cope with adverse weather-related shocks (e.g. Kazianga, 2006, Mobarak and Rosenzweig, 2012). Although urban dwellers are not directly exposed to these shocks, they have a potential interest in financial products that pay out in the event of adverse shocks, i.e. precisely when they would be obliged to send money to their rural relatives. Thus, marketing weather insurance to rural-urban migrants has the potential to overcome several of the obstacles to the success of insurance mentioned previously.

Third, urban migrants might have better understanding of formal insurance since they are more likely to be familiar with other products provided by formal financial institutions.

Fourth, serving urban clients may entail lower transaction costs for the insurance company compared to the cost of serving rural clients. An urban dweller will be able to purchase an insurance policy in the city and use mobile technology to make that insurance policy available to his relatives in the rural areas. To the best of our knowledge, this solution is novel and has not been implemented or investigated previously.

Our proposed solution addresses two problems. First, it is expected that by marketing the insurance product in urban areas, financial illiteracy regarding insurance may be a lesser concern since urban dwellers are more likely to be familiar with other forms of insurance already. Second, we are proposing a new marketing strategy which will drastically reduce transaction costs by offering insurance to urban dwellers instead of farmers as commonly practised. The theory of change of this study is schematized as follows:



The first key assumption behind our theory of change, as discussed above, is that urban migrants with rural family members engaged in farming will find rainfall index insurance attractive at market prices. This assumption was tested during Phase 1 of the study and our findings are discussed in Section 7. We expect that the evidence on the uptake of rainfall index insurance by urban migrants will demonstrate that this constitutes a viable marketing strategy, attract private insurers to the market and thus increase the supply of formal index-based insurance without subsidization by governments or international development agencies.

For urban migrants who provide assistance to their rural families in times of need, access to rainfall index insurance will reduce their risk burden, and thus allow them to pursue more profitable economic opportunities. Rural farmers who obtain access to formal insurance via their urban relatives will be able to smooth consumption more effectively. In addition, they will be encouraged to make farming and investment decisions that involve more risk but entail higher expected profits.

When urban migrants subscribe to the proposed insurance product, this would also provide rural farmers indirect experience with formal insurance. We hypothesize that this experience can help rural farmers improve their understanding of formal insurance, trust in formal insurance providers and, in the long run, improve direct uptake by rural farmers.

## **4. Monitoring Plan**

The key outcome for the intervention was the uptake of the rainfall insurance product by urban migrants. An important consideration in measuring uptake was ensuring that the sample of migrants to whom the product was offered was representative of the urban migrant links of rural households. This was achieved by (i) conducting a household census in 20 rural villages; (ii) conducting surveys in a random sample of rural households in each study village, and recording contact information on all Ouagadougou-based migrants from these villages; (iii) tracing and interviewing the Ouagadougou-based migrants, to collect basic details and confirm their rural family ties. This exercise generated a list of migrants with contact details targeted for a marketing intervention by PlaNet Guarantee to offer the rainfall index insurance product described in the previous section. Throughout the intervention, the organisation kept record of their activities with each individual; i.e. whether attempts at contact were successful, whether the participant attended the organisation's presentation, whether and when a follow-up call was made, whether a house visit was conducted and the outcome of the house visit. The following measures were taken to ensure the quality of the data collected during the village census the survey of rural and urban households.

- Team-leaders were selected for each survey team to carry out random spot-checks of surveyors on the field;
- Back-checkers were recruited and trained to perform phone back-checking in the local languages;
- At the end of each day of data collection, team-leaders were required to send a text message to field managers indicating the villages surveyed, the present location of the team and any challenges met during the day;
- High frequency checks were performed every day by a field-based research associate;

The rural and urban survey data were used to test two key assumptions underlying the study: (i) a large fraction of rural farming households have close family links in urban areas; (ii) urban migrant links commonly provide financial assistance to their rural relatives to help them cope with rainfall shocks. The findings are discussed in Section 1.8 .

## **5. Evaluation Questions and Primary Outcomes**

The key evaluation questions were as follows:

- What proportion of rural farmers have (extended) family ties in urban areas? To what extent do urban migrants assist rural relatives in times of need?
- How does the understanding of the concept of insurance and willingness-to-pay for insurance of urban migrants compare with that of rural farmers (where the two share an extended family link)?
- What is the take-up rate of the insurance product among urban migrants (with an extended family link in rural areas)?
- How cost-effective is marketing insurance to urban migrants versus rural farmers (uptake/cost of marketing)?
- Should indemnity payments be made to subscribers (urban migrants) or directly to farmers (rural relatives) whose farm plots are being insured?

## 6. Evaluation Design, Data and Methods

The evaluation questions listed above necessitated both a sample of rural farmers and a sample of urban migrants with family ties in rural areas. Furthermore, to meet the broader objectives of the study, we needed an urban migrant sample with village-based extended family members representative of the rural population, at least for some regions of Burkina Faso.

To construct the required samples, we began by randomly selecting 20 villages in 2 regions (10 villages per region) of Burkina Faso. A household census was conducted in each village, gathering, in particular, information on whether a household had migrant relatives living in the capital city, Ouagadougou. Based on the census, a stratified random sample ( $\frac{3}{4}$  with relatives in Ouagadougou) of 20 households were chosen from each village for the rural household survey. The rural survey respondents were asked to list all household members who have left the village, and all migrants based in the capital city Ouagadougou were traced for inclusion in the urban survey.

Both the rural and urban surveys included questions on transfers made and received via their social network, experience of adverse shocks in the preceding 5 years, and strategies adopted to cope with the shocks.

All urban migrants successfully traced and interviewed were invited to an hour-long demonstration of Planet Guarantee's existing rainfall insurance product. The demonstrations were followed up by telephone interviews to check whether the respondent would be willing to purchase the product on offer. House visits for the purpose of subscription were carried out for those who expressed interest at the market price.<sup>1</sup> Additional questions were asked to elicit WTP (willingness-to-pay) for those who declined the market price offer, with a promise of a house visit in the event that Planet Guarantee was able to offer the product at a subsidised price that exceeded their reported WTP at some future date.

In addition, the respondents in the rural and urban surveys were presented with a hypothetical rainfall index product, described in careful detail, followed by questions to test their understanding of the product and to elicit their willingness-to-pay for such a product.

Two focus groups discussions (FGDs) were planned to obtain insights on how the insurance product should be designed and implemented. The first one was an FGD with representatives of migrant network associations (MNAs) in Ouagadougou, with an overall aim of understanding whether and how migrant network associations can play a role in marketing rainfall index insurance to urban migrants. For this purpose, the representatives were asked questions on their (i) membership, (ii) their experience with formal financial products, (iii) whether the organisations played any role in providing assistance to their villages of origin following weather-related shocks, (iv) the potential

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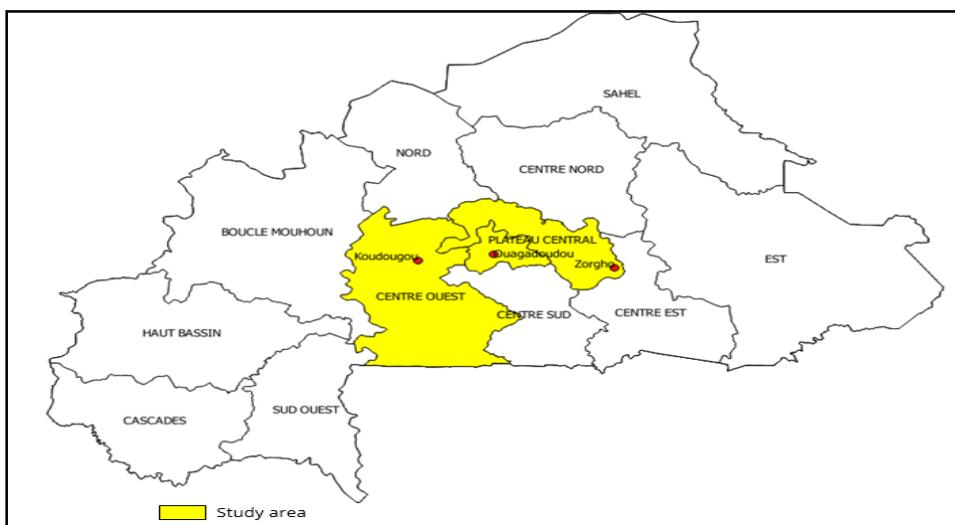
<sup>1</sup> In situations where the rural household reported multiple migrant relatives in Ouagadougou, the study team attempted to contact all of them, even if this meant contacting multiple urban migrants linked to the same rural household. Given that urban migrants had the opportunity to discuss the insurance policy with their rural relatives before signing up, urban migrants who shared the same rural relatives would have been able to coordinate their subscription decisions.

role of rainfall index insurance in providing such assistance, (v) the specifics of how such a product should be implemented, e.g. should payments be made directly to rural farmers or to urban migrants, should insurance be sold to groups or individuals, etc.

The second FGD was conducted with a random sample of urban migrants who were traced as part of the urban survey. This FGD was focused on understanding whether and how effectively they were able to provide assistance to their rural relatives following adverse weather shocks, their experience with formal financial products, their interest in a potential rainfall index insurance product marketed to urban migrants, and how such a product could be tailored to their needs and specific circumstances.

**Sampling design:** The key elements of the sampling design are provided in the preceding section. Here, we provide further details, in particular decisions made to simplify the logistics involved. The capital city Ouagadougou was selected as the site of the urban survey. The two regions of Burkina Faso selected for the rural census and survey were *Plateau Central* and *Centre Ouest*, and were chosen for their proximity to Ouagadougou. At the time of the study, the implementing agency Planet Guarantee was active in one of the regions but not in the other. The following map shows the locations of the regions in relation to Ouagadougou.

**Figure 1: Study Area**



10 villages were randomly selected in each region from a restricted set of villages meeting the following criteria:

- located less than 50 km from Ouagadougou;
- having no more than 75 households;
- within 15 km of other villages within the restricted set.

In villages with 50 or fewer households, all the households were included in the census. In villages with more than 50 households, one more neighbourhoods with close to 50 households were chosen for the census. The full list of villages, neighbourhoods and number of census households are provided in the table below.

**Table 1: Census Villages**

Village_name	Neighborhoods/Quartiers	# of Households
Bayandi-Nabyiri	Bayandi-Nabyiri	50
Bayandi-Tanguen	Bayandi	61
Badnogo	Badnogo	33
Bouloum-Nabyiri	RELWENDE	50
Dakongo	RASSEMBIN	49
Kabinou	Tensogyiri	53
Kamsi	Katingyiiri	53
Kolonkandé	Rana	54
Nobtenga	Nobtenga	47
Ouavoussé	Natenga	51
Ralo	Gourounko	31
	Nabyiri	22
Ramatoulaye	FARANGIN	45
Ramonkodogo	RAMONKODOGO-CENTRE	29
	BAONGNONRE	25
Silmiougou	Kombi	43
Tanguen	Tanguen	43
Tanséga	Tanséga	51
Wemyaoguen	Nabtenga	49
Yagoam	Yagoam	40
Yargo-Yarce	KOUGLIN	51
Zantonré	Zantonre Natenga	48

Planet Guarantee was not active in any of the selected villages at the time of the study although this was not a condition for selection.

The village census included a question on whether the household had one or more relatives living in the city of Ouagadougou. Following the census, a stratified random sample of 20 households were drawn from each village for inclusion in the rural survey, with three-quarters of the households drawn from those that had indicated the presence of a relative in Ouagadougou. During the rural survey, respondents were asked to list all former household members who were presently living in Ouagadougou, together with contact details. Our strategy involved attempts to trace all the listed members and, if successful, to include the migrant in the urban survey. The outcomes of these tracing attempts are discussed below.

## 6.1 Qualitative data collection

The research team (the Principals Investigators together with the local research team) met with representatives of Migrant Network Associations (MNAs) in Ouagadougou in March 2017. Three MNAs, each represented by 3 active members, were selected for the FGD. The selection of MNAs was based on the following criteria:

- One MNA from a region in which the implementing agency (Planet Guarantee) is very active;
- One MNA from a region in which Planet Guarantee is not presently active;
- One MNA from a region in which Planet Guarantee has a weak presence.

The FGDs with urban migrants were held in July 2017. Four FGDs were organized, each followed by an information session on the rainfall index insurance product, led by Planet Guarantee. A random sample of the migrants in the urban survey were invited to the FGDs and the full sample was invited to the information sessions.

## 6.2 Quantitative data collection

The rural census was conducted between May 2nd and May 8th. In total 978 surveys were administered at the household level during the census in the 20 villages/neighbourhoods listed in Table 1. The census questionnaire was programmed on electronic devices (i.e. tablets) and tested on SurveyCTO in March 2017. In April 2017, IPA organized a training of 17 surveyors on both census questionnaire and rural survey questionnaire and that lasts four days. This training consisted of:

- Presentation of IPA
- Presentation of the Agricultural Insurance Project
- Familiarization with the listing questionnaire in French
- Presentation of specific fieldwork procedures
- Refinement of the questionnaire's understanding in groups of local languages
- Simulations of interviews

The selection of surveyors was based on observations made by IPA staff about surveyors' skills with tablets and local languages as well as on several written tests on the understanding of the census questionnaires and survey process. In addition, two team-leaders were selected in order to take over the random spot-checks of surveyors on the field and overall team management. The selection of team-leaders was based on their results on written tests and on criteria such as observed punctuality, team work, organization, communication skills and past experience working with IPA. Two backcheckers were also recruited and trained to perform phone back-checking in the local languages. The selection of backcheckers was based on their understanding of the census questionnaires, autonomy and attention to details.

During the fieldwork, at the end of each day of data collection, team-leaders were required to send a text message to field managers indicating the villages surveyed, the present location of the team and any challenges met during the day. During this data collection process, the survey teams experienced some challenges relating to poor road conditions and reluctance of the population to be surveyed in some areas.

High frequency checks were performed every day by the Research Associate (field-based). These checks consisted mainly of:

- Checking that all surveys are complete
- Checking that there are no duplicates
- Checking that all surveys have consent
- Checking that certain variables have no missing values
- Checking skip patterns and survey logic
- Checking that there are no variables that contain only missing values
- Checking hard/soft constraints for continuous variables

Each team were required to complete surveys in three villages per day (about 300 households completed by the entire team per day). About 10% of households

interviewed the previous day were randomly selected for backchecking every day, with stratification by surveyor to ensure each surveyor was checked consistently over the survey period. Backcheck analysis was conducted both at the level of the surveyor and the team level. When differences emerged between responses collected by the surveyor and the back-checker, a number of measures were taken:

For a type 1 error rate above 10% and the error was attributable to the surveyor:

- If the error rate was less than 15%, a warning was given to the surveyor and his questionnaires were given priority in backchecking on subsequent days.
- If the error rate was more than 15%, a warning was given to the surveyor and also all his questionnaires were backchecked the next day. If there was no significant decrease (if the error rate remained above 15%), the surveyor was dismissed. Data from this surveyor was isolated and the Research Associate decided with his team whether or not to revisit the survey households.

If the error is attributable to back-checker, a warning is given to the back-checker along with instructions to redo the backchecks. During data collection, team-leaders had to visit some surveyors during their interviews to ensure that data protocols were rigorously followed. They had to complete an accompanying form programmed on their tablet and send the relevant data to the project team.

## 7. Study Timeline

**Data collection:** In this section, we provide details on the data collection procedure. The timeline of the study, together with the timing of the rural census and survey, and the urban survey and product pilot is shown in Figure 7.

Between March and April 2017, the rural survey questionnaire was programmed on SurveyCTO and tested on the field during a pilot in a rural location in March. In addition, the rural survey questionnaire was translated into the local language by a professional. For the rural survey, we retained the surveyor teams used for the census as the rural survey had to be implemented immediately after the census was completed. However, after the census, the research team went to the field for an additional training of surveyors. This training mainly consisted of reminding the surveyors:

- on some key sections of the questionnaire in French and in the local language
- specific fieldwork procedures

The rural survey data collection occurred between May 8th and May 15th. At the end of each day of data collection, team-leaders had to send a text message to field manager stating the villages and number of households surveyed, the present location of the team and any challenges met during the day. Protocols followed for data quality control were the same as those applied during the rural census.

During May and June 2017, the urban survey was programmed on SurveyCTO and tested in Balkuiy (a district of Ouagadougou) during a pilot in June. 17 surveyors were trained for the urban survey and 10 surveyors, 2 team leaders and 2 backcheckers were selected following training. The training procedure and selection criteria were similar to those used in the case of the rural census. Before starting data collection, we organized telephone call sessions (call center) to get in touch with all of the migrants cited by their

peers as living in Ouagadougou. Subsequently, our call center officer attempted to call back all 246 migrants for whom contact information was collected during the rural survey. And out of these 246 migrants, the call center officer was able to locate 170 currently living in Ouagadougou. The rest of the migrants had either moved elsewhere (20), could not be contacted (56) or were deceased (1).

Data collection started on June 15th. Each day, the call center had to arrange appointments with the migrants scheduled to be interviewed the following day. After each day of survey, the team leaders had to send text message to field manager indicating which migrants had been interviewed and any challenges met during the day. During the data collection process, the surveyors reported some challenges relating to the distances between the locations of different migrants, appointments missed by migrants, and reluctance of some migrants to respond to the questionnaire. This survey was conducted between June 15th and 20th with successful interviews with 124 migrants.

During the urban migrants survey, we adopted the same protocols for data quality control as in the rural census and survey. However, because of budget constraints, no backchecks could be conducted during the urban survey. In lieu of backchecks, team leaders were instructed to attend two interviews, chosen at random, during each day of the survey to monitor enumerators. In addition, a call centre was set up to confirm the location of each targeted respondent, and check their availability prior to the enumerator visit, to ensure that the right respondent was interviewed in each case.

The following table summarises key figures from all three surveys.

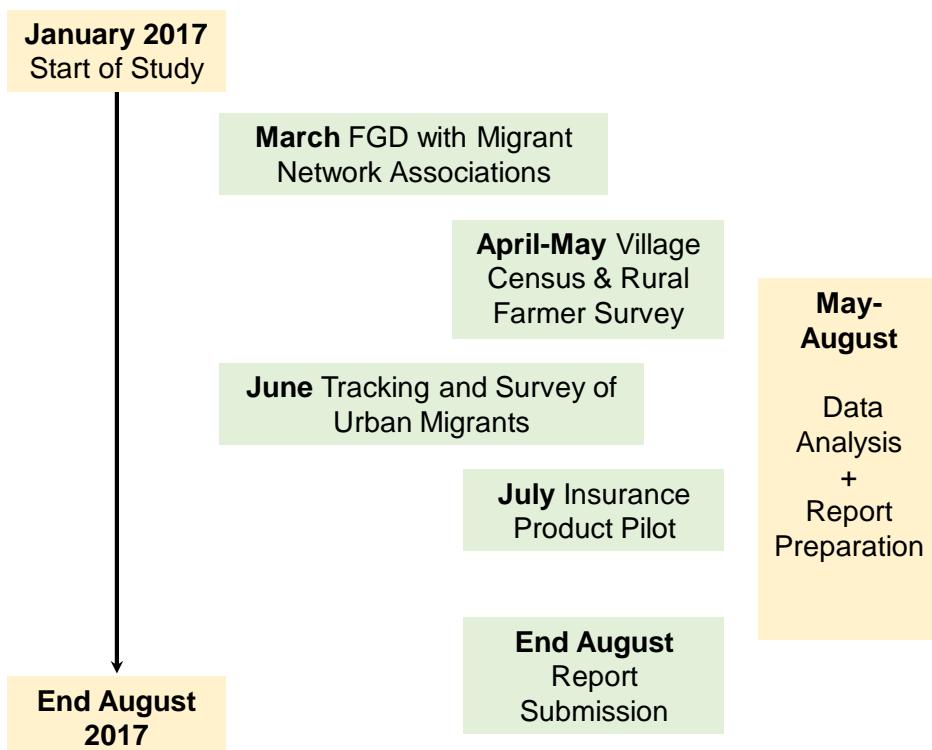
**Table 2: Summary table of key figures from surveys**

	Census	Rural survey	Urban survey
Survey date	April 2017	May 2017	June 2017
Number of surveyors	12	12	12
Number of surveys complete	978	400	124
Attrition <sup>2</sup>	22	0	46
Reasons for attrition	<ul style="list-style-type: none"> <li>○ Refusal (2)</li> <li>○ Household not found (20)</li> </ul>		<ul style="list-style-type: none"> <li>○ Migrants temporarily away (25)</li> <li>○ Refusal (21)</li> </ul>
% of surveys backchecked	6.4%	13%	0%
Average error rates at backcheck	9%	8%	-

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<sup>2</sup> Attrition is based on the difference between the targeted sample and the total number of complete interviews.

**Figure 2: Study Timeline**



## 8. Findings from the Evaluation

**Descriptive statistics:** we now use data from the rural census and the rural and urban surveys to establish some key patterns regarding social ties between rural farm households and urban migrants and the role that these social ties play in helping rural farmers cope with adverse weather shocks.

The census data shows that 56% of the rural households had at least one relative living in Ouagadougou. Of those, 70% declared that they had previously received transfers from their Ouagadougou-based relative (see Table 3 below).

**Table 3: Households with links to residents in Ouagadougou**

Migrant Link Information from Rural Census	mean	95% conf. int.	N
<i>Household has relatives in Ouaga</i>	0.56	[0.53-0.59]	978
<i>Receives transfers from relative</i>	0.70	[0.66-0.74]	546

The rural household questionnaire included more detailed questions on out-migration from the household, which revealed that 83% of rural households had at least one relative over 15 years of age who was previously a household member but has since moved away, either temporarily or permanently. Of these households, about half reported that they have relatives currently living in Ouagadougou and a third that they have relatives in other urban areas (see Table 4A below; recall that the rural survey was based on a stratified sample, with ¾ of the sample drawn from census households with at least one relative in Ouagadougou).

**Table 4A: Migration out of Rural Households**

Migration out of Rural Households from rural Survey			
	value	95% conf. int.	N
% household with migrants	0.83	[0.79 - 0.87]	400
% households with migrants in Ouga	0.51	[0.38 - 0.47]	333
% households with migrants in other urban areas	0.32	[0.27 - 0.37]	333
# Ouga migrants (if > 0)	1.45	[1.34 - 1.56]	170

**Table 4B: Descriptive Statistics for Rural and Urban samples**

	Household Size	Head Age (Years)	Female Head (%)	Years of Urban Residence	Education				Higher Ed.	Koranic	Literacy	N
					None	Elementary	Secondary					
Panel A: Rural Sample	11.48 (7.18)	53.20 (16.21)	9.68	NA	69.25	8.00	2.75	-	14.25	5.75	400	
Panel B: Urban Sample	5.59 (3.54)	34.29 (10.87)	22.76	13.03 (11.25)	26.83	24.39	39.02	7.32	2.44	-	124	

Note: Standard Errors in Parentheses.

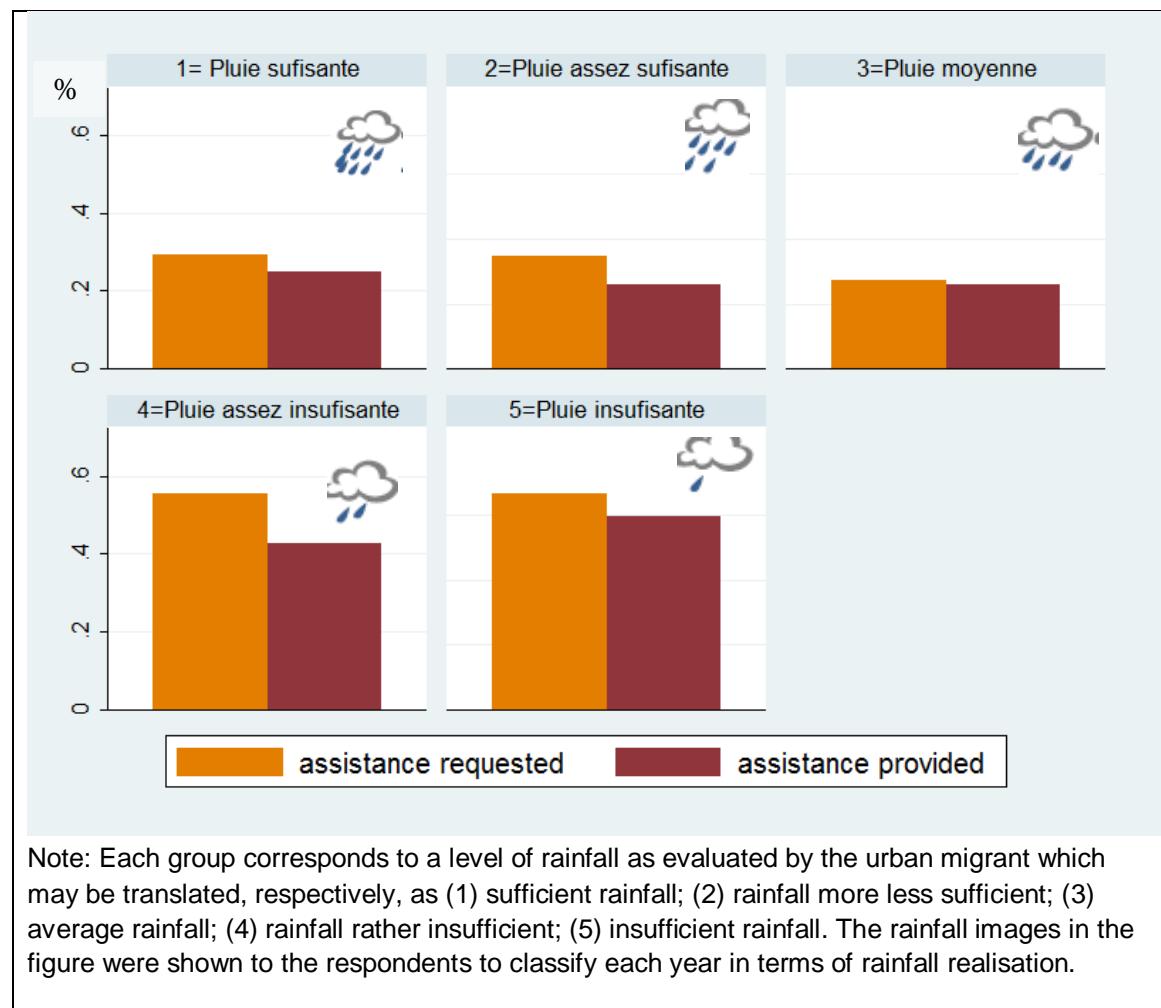
We compare the basic characteristics between the rural (panel A) and the urban (panel B) samples in Table 4B above. The characteristics we focus on include household size, gender, age, education, and for the migrants how long they have been living in Ouagadougou. For rural households, we report age, gender and education of the household head. For the urban sample, we report the characteristics of the migrant whose name was reported by the rural relatives.

The data in the table reveals a number of striking differences between rural household heads and their urban relatives. On average, rural households consist of 12 members compared to 6 members on average for urban households, i.e. rural households are twice as large as urban ones. Rural household heads are, on average, older and are more likely to be men. Moreover, rural household heads have received less formal education than urban migrants. About 69% of rural household head report not receiving any form of education. This proportion falls to 27% among urban migrants. Among urban migrants, 24% report receiving some elementary school level education, and 46% report attaining secondary school or higher education. In contrast, 8% of rural household heads report having attended elementary school and only 2.75% report having attended secondary school. On average, migrants have been living in Ouagadougou for about 13 years. Given that the average age of migrants is 33 years, one can infer that on average migrants moved to Ouagadougou in their early twenties.

The next question we address is whether and to what extent urban migrants provide assistance to their rural relatives during adverse weather shocks. The urban survey included questions on whether they had received request for assistance during each of the three years prior to the survey (2014, 2015 and 2016) and, if so, if they had been able to respond to this request for assistance positively. The urban respondents were also asked to assess the level of rainfall during each of those years in terms of agricultural needs. This information allows us to construct Figure 3. The figure shows that while less than 30% of urban migrants receive requests for assistance from their rural relatives when there is sufficient rainfall, this figure rises to nearly 60% when the rainfall was thought to be insufficient. In a majority of instances, the urban migrants are able to, and do, respond positively to the request for assistance.

The rural survey also provides corroborative evidence on the importance of transfers from relatives in coping with adverse shocks. For the three years preceding the survey (2014-16), rural respondents classified 51.2% of the years as periods in which they experienced at least one adverse shock (see Table 4 below). They coped with the shock with a transfer from a relative in 16.3% of cases, by engaging in asset sales in 31.7% of cases and did not adopt any coping mechanism in 33.1% of cases. None of the respondents reported using formal insurance, and less than one percent of the respondents had coped with the shock using credit from a formal institution. These figures suggest that there is potential for relatives of rural farmers to play a greater role in helping with adverse shocks.

**Figure 3: Assistance from Urban Migrants vs Rainfall Shortage**

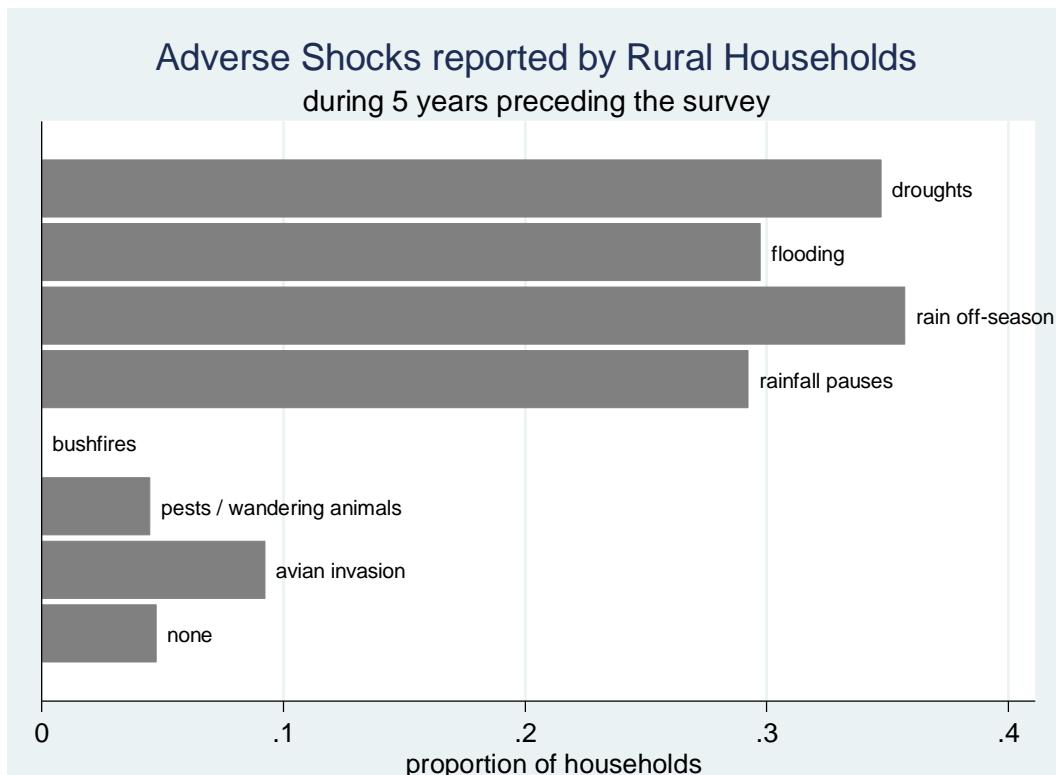


**Table 5: Coping with Adverse Shocks**

Risk-Coping Mechanisms for Rural Households (2014-16)	
	%
household experienced shock	51.2
<i>household coped with shock with</i>	
asset sales	31.7
help from relations	16.3
formal credit	0.9
other measures	26.2
nothing	33.1
N	1,128

The rural survey also included questions on the types of adverse shocks experienced during the five years preceding the survey. Among the most commonly reported shocks are droughts (34.75%) and interruptions in rainfall (29.25%) but flooding (29.75%) and off-season rains (35.75%) appear to be equally important.

**Figure 4: Types of shocks faced by farmers**



**Mixed method analysis:** The key remarks to emerge from the focus-group discussions with the migrant network associations and the random sample of urban migrants were as follows:

- An almost universal interest in a rainfall index insurance product marketed at urban migrants provided that the price was within their means;
- Concerns about basis risk and measurement of rainfall at the plot level;
- Indications that they would find the product more attractive if it also covered the risk of flooding and high winds;
- A strong preference that indemnity payments are paid directly to the rural farmers for whom urban subscribers purchase insurance, primarily to avoid the temptation that urban subscribers use the money for other needs before it can be transmitted to their rural relatives;
- A strong preference for individual subscription rather than group subscription.

Based on the feedback received from the focus-group discussions, the following decisions/actions were taken regarding the piloting of the product during Phase 1:

- (i) The pilot offered individual subscription rather than group subscription. This choice was also motivated in part by the logistical challenge of identifying and coordinating between a number of potential subscribers who would be interested in purchasing insurance for the same locality (i.e. whose rural relatives farm in the same locality).
- (ii) Although most participants in the focus-group discussions preferred contracts in which indemnity payments were made directly to rural farmers, we designed two contracts: (a) indemnity payments made to the urban subscriber; (b) indemnity payments made directly to the rural farmer. The contract on offer was randomised across respondents during the pilot to compare the demand for each.

- (iii) The repeated mention of flooding during the focus group discussions also corroborate with the quantitative data on adverse shocks faced by rural farmers (see figure 7 above). Therefore, the possibility of indemnity payments being triggered by excessive rainfall (so that the product covered the risk of flooding) was explored with Planet Guarantee. But introducing this feature during the Phase 1 pilot turned out to be infeasible due to the limited timeframe of the study. We decided that a product where payments are triggered by rainfall shortage only should, nevertheless, generate significant interest because droughts are more frequent than inundations (see figure 7), and so we proceeded to pilot such a product. It is reasonable to expect that urban migrants would have a higher willingness to pay if the product also covered the risk of excessive rainfall.
- (iv) Regarding concerns with basis risk, we decided that Planet Guarantee's use of high precision satellite technology to measure rainfall at different stages of the growth cycle (see the description of the intervention in Section (1a) above) minimised this problem. The focus group discussions were conducted before the details of Planet Guarantee's rainfall index insurance product was demonstrated to the participants. We expected that a careful demonstration of the existing product would allay most of their concerns about basis risk and rainfall measurement and, so, no other action was taken in this regard prior to the product pilot.

A key question we aimed to tackle in Phase 1 of the study was the marketability of the insurance product to urban migrants, as compared to their rural relatives. Resource constraints and logistical challenges meant that it was not possible to pilot the product with rural farmers or include incentivised willingness-to-pay questions in the rural survey. Nevertheless, a module on a hypothetical insurance product included in both surveys provides some insights about relative marketability.

In both surveys, a hypothetical rainfall index insurance product was described in careful detail to the respondents, followed by questions to test their comprehension. After the product had been described, respondents were asked if they understood how it worked and if they replied negatively the demonstration was repeated. When a respondent confirmed that they had understood, they were subject to a short quiz about the product. The performance of the urban and rural migrants were very similar: an average of 1.37 incorrect answers in both cases. 30% of urban migrants requested that the description of the product be repeated compared to 29% of rural farmers.

**Table 6: Comparing WTP responses of rural farmers and urban migrants**

Comparing WTP Responses of Rural Farmers and Urban Migrants				
	urban	95% conf. int.	rural	95% conf. int.
<i>Explained more than once</i>	0.30	[0.22 - 0.38]	0.29	[0.24 - 0.33]
<i>Number of incorrect answers</i>	1.37	[1.27 - 1.48]	1.37	[1.30 - 1.43]
<i>contract interesting</i>	0.96	[0.92 - 0.99]	0.94	[0.92 - 0.97]
<i>willing to pay 2000 CFA</i>	0.83	[0.76 - 0.90]	0.83	[0.80 - 0.87]
<i>mean WTP in CFA</i>	1840	[1766 - 1913]	1843	[1803 - 1882]

Following the quiz, the respondents were asked if they would be willing to purchase the product at the market price of 2000 CFA. Those who replied negatively were subsequently asked, in succession, if they would be willing to purchase at a price of 1800, 1600 or 1400 CFA and, if not, at what price they would be willing to buy the product. In both surveys, 83% of the respondents expressed a willingness to buy the product at 2000 CFA. Averaging across the price at which respondents expressed a willingness to buy, urban respondents had a mean WTP of 1840 CFA compared to 1843 CFA for rural farmers.

**Results from the Pilot with Urban Migrants:** Planet Guarantee's rainfall index insurance had an uptake rate of 27 out of 124, i.e. 21.7%, among urban migrants with relatives in rural areas during the pilot. For the purpose of comparison, Planet Guarantee's subscription rate in rural areas is between 20 and 35% but this includes areas where the product has been offered and marketed over several years (By contrast, the subscription offer for urban migrants was made during a tight two-week window, given that policies had to be signed before the rainy season got fully underway). Based on PlaNet Guarantee's administrative data, the cost per subscription among urban migrants ranged from 10,000 to 25,000 CFA. This includes the cost of marketing, phone calls, home visits, etc. In comparison, the initial cost per subscription among rural farmers range from 20,000 to 40,000 CFA.

**Regression analysis of insurance take-up by urban migrants:** In this section, we conduct an exploratory analysis of the insurance product take-up by urban migrants. As described above, we use this information on take-up and the urban and rural survey to investigate the determinants of take-up. We use simple regression analysis, where the dependent variable ( $y$ ) is binary indicating whether an urban migrant subscribed to the product or not, and the following explanatory variables:

- Compensation is paid directly to the relative: at the subscription stage, each migrant was randomly offered either to have the insurance company pay the eventual compensation to their relative, or to collect the compensation himself or herself. The variable *pay\_to\_relative* takes a value of 1 in the first case and 0 in the second case.
- How long the migrant has been living in the city of Ouagadougou (*duration\_ouaga*) measured in years. We hypothesize that migrants who moved recently to Ouagadougou may have stronger ties with their household of origin. On the other hand, it is plausible that individuals who have lived in Ouagadougou for a longer period of time would be less financially constrained, and hence could afford the premium.
- How frequent were crop shocks experienced by the rural household between 2012 and 2016 as reported by the migrant (*shocks\_freq\_mg*). We hypothesize that migrants who believe (correctly or incorrectly) that their household of origin is often exposed to harvest losses would be likely to purchase the coverage.
- How frequent were crop shocks experienced by the rural household between 2012 and 2016 as reported by the rural household (*shocks\_freq\_hh*). We hypothesize that if households who face frequent shocks usually turn to their urban relatives for help, then the urban migrant would be likely to purchase insurance.

- Whether the rural household reported receiving financial support to cope with negative shocks during the last 5 years (*financial\_support*).
- Whether the migrant reports to have provided financial support during the last 5 years (*migrant\_financial*)
- Whether the shocks (experienced by the rural household) and reported by the migrant are covered by the product (*coverable\_shock\_mg*). In our data, only droughts and adverse rainfall distribution would be covered. Other shocks (e.g. illness, pest invasion, bushfire, flooding) are not covered. We hypothesize that the migrant is more likely to purchase the insurance if he/she thinks that the shocks experienced by his/her relatives most of the time are covered.
- Whether the shocks (experienced by the rural household) and reported by the household are covered by the product (*coverable\_shock\_hh*). We hypothesize that the migrant is more likely to purchase the insurance if the shocks his/her relatives experience most of the time are covered.

Because we have a relatively small sample of 124 observations and relatively few clusters (20 villages), we enter these variables individually in order to keep the specifications parsimonious. We also control for the relationship between the migrant and the household head of the rural household<sup>3</sup>. Table 5 shows the estimates for each specification. We find that the coefficient for *pay\_to\_relative* consistently has a positive and statistically significant effect on uptake; i.e. migrants who were offered the product in which indemnity payments were made directly to the rural farmer were more likely to purchase.

We also find that migrants who reported a higher number of shocks (*shocks\_freq\_mg*), or reported at least one coverable shock (*coverable\_shock\_mg*), experienced by their rural relative were more likely to purchase (coefficients statistically significant at the 10% level). However, the corresponding reports from the rural households themselves have no effects on uptake (coefficients are slightly negative and statistically insignificant). This pattern suggests that there is informational asymmetry about shocks experienced by the rural household, and the urban migrant's purchase decision is sensitive to his/her own perception or memory of shocks experienced by the rural farmer, but not to the rural relatives own reports.

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<sup>3</sup> In practice, we control for whether the migrant is a child of the household head, or the household head's brother or sister.

**Table 7: Determinants of Take-Up of Rainfall Index Insurance by Urban Migrants**

VARIABLES	(1) PM	(2) PM	(3) PM	(4) PM	(5) PM	(6) PM	(7) PM	(8) PM
pay_to_relative	0.176* (0.10)	0.186* (0.092)	0.207* (0.105)	0.176* (0.097)	0.180* (0.093)	0.184* (0.098)	0.222** (0.101)	0.176* (0.097)
duration_ouaga		0.024 (0.051)						
shocks_freq_mg			0.059* (0.034)					
shocks_freq_hh				-0.024 (0.045)				
financial_support					0.113 (0.090)			
migrant_financial_support						0.098 (0.076)		
coverable_shock_mg							0.195* (0.103)	
coverable_shock_hh								-0.003 (0.070)
Brother_Sister	0.131 (0.16)	0.157 (0.144)	0.148 (0.163)	0.131 (0.166)	0.138 (0.171)	0.120 (0.160)	0.095 (0.164)	0.131 (0.164)
Child	-0.021 (0.15)	0.003 (0.130)	-0.022 (0.155)	-0.024 (0.152)	-0.005 (0.158)	-0.026 (0.156)	-0.064 (0.158)	-0.021 (0.152)
Constant	0.102 (0.15)	0.048 (0.124)	-0.013 (0.188)	0.143 (0.166)	0.020 (0.154)	0.062 (0.165)	-0.041 (0.170)	0.104 (0.155)
Observations	123	122	123	123	123	123	123	123
R-squared	0.193	0.198	0.215	0.194	0.207	0.204	0.216	0.193

Table: Determinants of take-up of rainfall index insurance by urban migrants

Robust standard errors in parentheses, clustered at the village level.

\*\*\*: significant at the 1% level, \*\*: significant at the 5% level, \*: significant at the 10% level.

Source: authors' calculations using the pilot survey.

To explore possible heterogeneity of the effects of the “pay to relative” offer on uptake of the product, in Table 6A, we report on estimations where the *pay\_to\_relative* variable is interacted, one at a time, with the other explanatory variables in Table 5. In most instances, the estimated interaction coefficients are statistically insignificant with two exceptions. We find that the longer a migrant has lived in Ouagadougou, the weaker is the effect of the “pay to relative” offer on uptake, while its effect is stronger if the rural household reported a coverable shock.

**Table 8A: Heterogeneity analysis of the take-up of rainfall index insurance by urban migrants**

VARIABLES	(1) PM	(2) PM	(3) PM	(4) PM	(5) PM	(6) PM	(7) PM
pay_to_relative	0.423** (0.158)	0.218 (0.151)	0.171 (0.195)	0.128 (0.167)	0.166 (0.115)	0.273* (0.140)	-0.117 (0.127)
duration_ouaga	0.090 (0.055)						
pay_to_relative#c.duration_ouaga	-0.183*** (0.062)						
shocks_freq_mg		0.062 (0.047)					
pay_to_relative#c.shocks_freq_mg		-0.007 (0.083)					
shocks_freq_hh			-0.025 (0.072)				
pay_to_relative#c.shocks_freq_hh			0.003 (0.095)				
financial_support				0.071 (0.139)			
pay_to_relative#financial_support				0.083 (0.240)			
migrant_financial_support					0.077 (0.111)		
pay_to_relative#migrant_financial_support					0.047 (0.132)		
coverable_shock_mg						0.237** (0.101)	
pay_to_relative#coverable_shock_mg						-0.063 (0.199)	
coverable_shock_hh							-0.205* (0.114)
pay_to_relative#coverable_shock_hh							0.459** (0.192)
Constant	-0.097 (0.155)	-0.020 (0.207)	0.146 (0.191)	0.058 (0.165)	0.074 (0.175)	-0.087 (0.200)	0.283 (0.165)
Observations	122	123	123	123	123	123	123
R-squared	0.239	0.215	0.194	0.209	0.205	0.216	0.247
F-Stat. joint significance	2.963	1.673	1.107	2.932	2.019	5.065	2.384
p value	0.0582	0.207	0.371	0.0599	0.145	0.00958	0.101

Robust standard errors in parentheses, clustered at the village level.

\*\*\*: significant at the 1% level, \*\*: significant at the 5% level, \*: significant at the 10% level.

Source: authors' calculations using the pilot survey.

To interpret the coefficient estimates in Table 6A better, we calculate at the sample mean the marginal effects for each variable, shown in the table below.

**Table 8B: Marginal Effects at Sample Means on Urban Migrant Uptake of Insurance**

	1	2	3	4	5	6	7
pay_to_relative	0.176	0.206	0.176	0.180	0.186	0.223	0.167
p-value	0.09	0.07	0.09	0.07	0.07	0.04	0.08
Variable below	0.004	0.059	-0.024	0.110	0.099	0.207	0.012
p-value	0.10	0.11	0.61	0.24	0.20	0.02	0.18
duration	shocks	shocks	financial	migrant_financ	coverable_s	coverable_sh	
_ouga	_freq_	_freq_h	_support	ial_support	hock_mg	ock_hh	
mg	h						

The estimates in Table 6B show that, at the sample mean, the effect of the “pay to relative” offer on uptake is positive and statistically significant, consistently in the range between 16-20%. Turning to the other explanatory variables, we again find the pattern the probability of uptake is increasing in the migrants’ report of the number of adverse shocks experienced by the household but is unaffected by the rural household’s own reports. Similarly, we find that uptake is significantly higher if the migrant reported a coverable shock but the corresponding effect for the rural household’s own report of a coverable shock is statistically insignificant.

## 9. Implication of the Study Findings

Using the findings reported in sections 7 and 8, we are now in a position to address all the Phase 1 evaluation questions listed in Section 1(a).

### 9.1 Implications for the Intervention

*What proportion of rural farmers have (extended) family ties in urban areas? To what extent do urban migrants assist rural relatives in times of need?*

- Using census data from 20 villages within 50km of Ouagadougou, we find that 56% of rural households have a relative residing in Ouagadougou; and about 39% of rural households receive transfers from a Ouagadougou-based relative (Table 2). These proportions are potentially lower for villages located further from Ouagadougou but they do not take into account relatives living in other major cities (e.g. Bobo-Dioulasso and Koudougou). Using survey data on Ougadougou-based migrants from the same villages, we find that about 30% receive requests for assistance from rural relatives in years that the rains have been sufficient for agriculture, and this figure rises to nearly 60% when the rains have been insufficient (Figure 2).

*How does the understanding of the concept of insurance and willingness-to-pay for insurance of urban migrants compare with that of rural farmers (where the two share an extended family link)?*

- We find that the understanding of rainfall index insurance and responses to willingness-to-pay questions are very similar between rural farmers and urban migrants, with differences being statistically insignificant (Table 4).

*What is the take-up rate of the insurance product among urban migrants (with an extended family link in rural areas)?*

- A pilot of Planet Guarantee's rainfall index insurance marketed to urban migrants with relatives in rural areas had an uptake rate of 27 out of 124, i.e. 21.7%. The take-up rate is higher for migrants who have recently arrived in Ouagadougou and for migrants who reported that their rural relative had experienced an adverse shock during the previous 5 years (Tables 5, 6A and 6B). For the purpose of comparison, Planet Guarantee's subscription rate in rural areas is between 20 and 35% but this includes areas where the product has been offered and marketed over several years.

*How cost-effective is marketing insurance to urban migrants versus rural farmers (uptake/cost of marketing)?*

- Based on PlaNet Guarantee's administrative data, the cost per subscription among urban migrants ranged from 10,000 to 25,000 CFA. This includes the cost of marketing, phone calls, home visits, etc. In comparison, the initial cost per subscription among rural farmers range from 20,000 to 40,000 CFA.

*Should indemnity payments be made to subscribers (urban migrants) or directly to farmers (rural relatives) whose farm plots are being insured?*

- The take-up rate was higher (estimates ranging from 17 to 22%) when the migrant was offered an insurance contract which specified that indemnity payments to be paid directly to the rural relative (Table 5 and 6B). This was consistent with findings from the focus group discussions, where urban migrants explained that they preferred this option because of the possible temptation to use an insurance payout, intended for their rural relative, for some other purpose.

## 9.2 Implications for Further Research

The study also yielded some unexpected findings that have important implications for the design and marketing for future insurance products designed for urban migrants. We found that the uptake rate of the marketed insurance policy was higher when the migrant reported that their rural relative had experienced at least one adverse shock – covered by the insurance policy – during the preceding 5 years; but the uptake rate did not respond to the incidence of such shocks as reported by the relatives themselves. A similar pattern emerges when we use the “total number of shocks” in lieu of “at least one coverable shock”. These findings mean that there are important differences between the urban migrant and the rural farmer's views about the shocks suffered by the latter. There are two explanations that suggest themselves. The first is that the urban migrant does not have as good a recollection of the shocks suffered as their rural relatives. The second is that the urban migrant does not trust the shock reports that he or she obtains from the rural relatives.

If either explanation holds true, a marketing strategy where urban migrants are given information about the weather-related incidents in their villages of origin would help them make better decisions regarding the purchase of the insurance policy, and potentially improve uptake. The evidence also points to important informational asymmetries about weather shocks between urban migrants and their rural relatives which would hinder informal risk-sharing. The rainfall index insurance product, by providing third-party verification of these shocks would remove these informational asymmetries and thus improve the scope for risk-sharing.

## 10. Major Challenges

**Tracking urban migrants:** The major challenge was to locate urban migrants in Ouagadougou based on the contacts and the phones numbers provided by their relatives in the villages during the rural survey. A number of phones numbers provided by the rural relatives were not correct or may have been no longer used by the urban migrants. In case the phones numbers did not work, the enumerators contacted the rural relatives to request alternative phones numbers. This exercise was not budgeted for, and thus was limited in scope. In the future, we believe it will be more effective to have the enumerators try each phone numbers at the time of the rural survey. Thus, incorrect phones numbers can be spotted and corrected in the field.

**Surveying urban migrants:** Amongst the urban migrants who were successfully tracked, several could not be surveyed because they were out of town at the time of the survey or were not available most of the time. The enumerators were instructed to make multiple visits and or to arrange appointments with the migrants for later dates when they returned to town. The key lesson is that we have estimates of the fraction of migrants who could be successfully surveyed out of those contacts collected from the rural respondents. In the future, we plan on using these estimates when deciding on the number of migrants from whom we collect contacts during the rural survey.

**Factors impeding policy subscription:** Planet Guarantee noted a number of factors which impeded policy subscription during the urban pilot, which we report here. First, financial constraints faced by urban migrants meant that many who were interested in the insurance policy did not have the means to pay for the cost of subscription. The limited time frame of the pilot, with marketing conducted over a period of two weeks, meant that urban migrants who were potentially interested in subscribing to the policy had a limited period in which to allocate funds for this expense. Therefore, any follow-up study should provide a longer window for marketing (prior to the start of the rainy season). Second, the low level of coverage in the pilot product, limited at 25,000 FCFA, meant that in the event of severe shocks urban migrants would have to provide assistance to their rural relatives even if the policy triggered a 100% indemnity payment. Therefore, Planet Guarantee recommended a higher limit on coverage when marketing the product in the future.

## Appendix: Survey Questionnaires

Enquête urbaine – Assurance agricole au Burkina Faso	ID du ménage	

### **INSTRUCTIONS A L'ENQUETEUR:**

**OFFICERS INFORMATION: Entrer le Nom et le Code**

1. Enquêteur	2. Editeur	3. Superviseur	4. Vérifié par
3.1 _____ ____3.2 _____	4.1 _____ ____4.2 _____	5.1 _____ ____5.2 _____	6.1 _____ ____6.2 _____

### **RESULTATS DES VISITES**

Date de visite	____/____/2017
5. Heure de début/Heure de fin	____:____ / ____:____
6. Résultats des Visites  *Code pour les résultats: 1=Accomplie avec succès 2=Aucun membre compétent présent au moment de l'enquête 3=Ménage entier absent pour une longue durée 4=Refus (spécifier la raison) 5=Ménage non trouvé 7=Autre (spécifier)	Code. <input type="text"/> Spécifier si réponse=4 ou 5: _____

### **I. Informations sur le ménage d'origine du migrant (Informations pré-renseignées)**

Enquêteur, pour toutes ces informations ils vous suffira d'enregistrer le ID du menage d'origine du Migrant. Une fois que le ID est correctement vous aurez l'ensemble des informations ci-dessous apparaitre sur votre outil de collecte de donnees.

1.0 Village d'origine
1.1 Nom du quartier
1.2 Nom et prenom du chef de menage
1.3 La religion du chef de ménage
1.4 L'age du chef de ménage

1.5 Niveau d'éducation du chef de ménage
1.6 Ethnie du chef du menage
1.7 Sous groupe ethnique du chef de menage
1.8 Nombre d'annees d'existence du chef de menage dans le village
1.9 Village d'origine du chef de menage
1.10 Surnom du chef de menage
1.11 Nom du repondant lors de l'enquete en milieu rural

**Enquêteur**, veuillez poser cette question pour se rassurer que ces informations correspondent au ménage d'origine du migrant.

1.12 Pensez-vous que toutes ces informations correspondent à votre ménage d'origine ?

## II- Informations sur le questionnaire

2.1 Quartier	CODE: _____	
2.2 Secteur	CODE: _____	
2.3 COORDONNEES GPS du ménage	a. LATITUDE: <b>S/N</b> <input type="text"/> ° <input type="text"/> , <input type="text"/> ' b. LONGITUDE: <b>E/W</b> <input type="text"/> ° <input type="text"/> , <input type="text"/> '	c. ALTITUDE: <input type="text"/> . <input type="text"/> Mètres au dessus du niveau de la mer d. PRECISION: <input type="text"/> METER
2.4 Nom et Prénom du répondant	_____	
2.5 Quelle est votre relation vis-a-vis du chef de ménage	Voir code relation	
2.6 Êtes-vous ou un autre membre de votre ménage propriétaire d'une parcelle d'habitation?	1= Oui 2= Non	→ Question 2.8
2.7 Dans quelle localité cette parcelle d'habitation se trouve-t-elle ?	1= village d'origine 2= Ouagadougou zone lotie 3= Ouagadougou zone non lotie 4= Autre ville lotie 5= Autre ville non lotie 6= Autre village	
2.8 Etes vous ou un autre membre de votre menage proprietaire d'une parcelle	1= Oui 2= Non	
	→ Question 2.10	

cultivable?	
2.9 Dans quelle localité cette parcelle cultivable se trouve-t-elle ?	1= Village d'origine 2= Autre zone rurale
2.10 Avez-vous un numéro de téléphone où l'on peut vous joindre ?	1=Oui 2=Non
2.11 Numéro de téléphone Enquêteur : enregistrer tous les numéros qui s'appliquent	

### **III- Liste des membres du ménage**

Je voudrais connaître l'âge, le sexe, l'état matrimonial, le niveau d'éducation et la relation avec le chef de ménage de chacun des membres de ce ménage qui y résident actuellement.

3.0 Combien de membres votre ménage compte actuellement (ceux qui sont pour la plupart du temps au sein du ménage)?

Numero	3.1 Donner le nom et prénom du membre de famille.	3.2 Quel est le sexe de [Nom]?	3.3 Quel est l'âge de [Nom]?	3.4 Quel est l'état matrimonial de [Nom]?	3.5 Quel est le niveau d'éducation de [Nom]?	3.6 Quelle relation existe-t-elle entre [Nom] et le chef de ménage?	3.7 Quelle est l'occupation principale de [Nom]?  Voir code occupation	3.8 D'où [Nom] est-il originaire ?			3.9 Depuis combien d'années [Nom] est-il installé ici à Ouagadougou?	3.10 <b>Quelles sont les raisons de migration de [Nom]?</b>	3.11 Est-ce [Nom] a des Biens ou investissements quelconques dans votre village d'origine?  1=Oui 2=Non
								Province	Commune	Village			
1													
2													
3													
4													
5													

<u>Code sexe</u> Masculin=1 Féminin=2  <u>Code Etat matrimonial</u> 1=Jamais marié(e) 2=Mariée (traditionel, religieux ou civil) 3=Concubinage 4=Veuve 5=Divorcée 6=Ne vit plus avec son conjoint/Séparée 7=Autre, spécifier	Code occupation 1= Agriculteur 2=Maçon 3=Fermier 4=Eleveur 5=Chasseur 6=Menuisier 7=Tailleur 8=Mécanicien 9=Forgeron 10=Tisserand 11=Dolotière 12=Filleuse de coton 13=Autre à préciser
<u>Code religion</u> 1=Sans religion 2=Musulman 3=Catholique 4=Protestant 5=Traditionnel/animiste <b>6=Autre, spécifier</b>	<u>Code niveau d'éducation</u> 1= Aucun 2= Ecole franco Arabe 3= Niveau primaire 4= Niveau secondaire 5= Niveau supérieur 6= Autre à préciser
<u>Code raison de migration</u> 1= raisons d'études 2= raisons de travail 3= raisons familiales (être né ici--- pour les migrants de seconde génération et plus) <b>4= autres raisons</b>	<u>Code lien de parenté</u> 1=Epouse/ Epoux 2=Fille/Fils 3=Belle-fille/Beau-fils 4=Sœur/Frère 5=Belle-sœur/Beau-fils 6=Cousin/Cousine 7=Nièce/Neveu 8=Petite-fille/Petit-fils 9=Petite-fille/petit-fils non biologique (Grandchild-in-law) 10=Oncle/Tante 11=Maratre/petite maman 98=Autre (spécifier)

## **CODES**

## IV- Réseau de solidarité

**4.0** Est-ce qu'il est arrivé une fois au cours des 03 dernières années que vous fassiez des transactions d'argent avec quelqu'un d'autre ?

1= Oui 2= Non → Section V

### IV.1- Transfert reçu (flux entrants)

Numéro	5.1 Lister les personnes avec lesquelles vous avez reçu des transferts durant ces 03 dernières années.	5.2 Quel est le lien de parenté entre vous et [Nom] ? 1=Epouse/ Epoux 2=Fille/Fils 3=Belle-fille/Beau-fils 4=Sœur/Frère 5=Belle-sœur/Beau-fils 6=Cousin/Cousine 7=Nièce/Neveu 8=Petite-fille/Petit-fils 9=Petite-fille/petit-fils non biologique (Grandchild-in-law) 10=Oncle/Tante 11=Maratre/petite maman 12=Aucun lien de parenté <b>98=Autre (spécifier)</b>	5.3 Ou est ce que réside [nom] actuellement ? Voir code lieu de résidence actuel 1= dans mon village d'origine 2=Ouagadougou 3= Autre village en milieu rural 4= Autre ville en milieu urbain <b>5=A l'extérieur du pays</b>	5.4 Donner le nom du chef de ménage de [Nom] Enquêteur, enregistrer le ID du ménage correspondant	5.5 Enquêteur, veillez saisir le ID du ménage correspondant à base de l'enquête recensement des ménages.	Transferts reçus			
						Années	Cash (FCFA)	Est-ce que [Nom] vous a aidé en travaillant dans votre champ en l'année [Année]?	Biens en nature ( estimé en FCFA)
1						2016			
						2015			
						2014			
							2016		
2						2015			
						2014			

#### IV.2- Transferts faits (flux sortants)

Numéro	5.7 Lister les personnes a qui vous avez fait/envoyé des transferts durant ces 03 dernières années.	5.8 Quel est le lien de parenté entre vous et [Nom] ? 1=Epouse/ Epoux 2=Fille/Fils 3=Belle-fille/Beau-fils 4=Sœur/Frère 5=Belle-sœur/Beau-fils 6=Cousin/Cousine 7=Nièce/Neveu 8=Petite-fille/Petit-fils 9=Petite-fille/petit-fils non biologique (Grandchild-in-law) 10=Oncle/Tante 11=Maratre/petite maman 12= Aucun lien de parenté <b>98=Autre (spécifier)</b>	5.9 Ou est ce que réside [nom] actuellement ?  Voir code lieu de résidence actuel  1= dans mon village d'origine  2=Ouagadougou 5.6  3= Autre village en milieu rural → 5.6 4= Autre ville en milieu urbain 5.6  <b>5= A l'extérieur du pays</b> → 5.6	5.10 Donner le nom du chef de ménage de [Nom]  Enquêteur, enregistrer le ID du ménage correspondant	5.11 Enquêteur, veillez saisir le ID du ménage correspondant à base de l'enquête recensement des ménages.	5.12 Donner la valeur totale des montants reçus ces 03 dernières années	<b>Transferts envoyés</b>		
							Années	Cash (FCFA)	Est-ce qu'il est arrivé une fois en [Année] que vous travailliez dans le champ de [Nom] pour l'aider?
1						2016			
						2015			
						2014			
2						2016			
						2015			
						2014			

## V- Risques agricoles et climatiques

**Enquêteur :** pour chacun des chocs X, poser l'ensemble des questions ci-dessous.

<b>Années</b>	5.1 Quels ont été les 03 principaux chocs que votre ménage d'origine au village a vécus durant ces 05 dernières années ? [Choisir au plus 03 chocs]. Voir code chocs	5.2 Quelles sont les 03 principales cultures cultivées par votre ménage d'origine qui ont été frappées par ces [chocs] ? [Choisir au plus 03 cultures]. Voir code cultures	5.3 Pour atténuer les effets de ces chocs [chocs], votre famille au village vous a-t-elle demandé une quelconque assistance ?  1=Oui 2=Non → année suivante	5.4 Aviez-vous pu répondre favorablement à la demande de votre famille ?  1=Oui 2=Non → année suivante	5.5 Comment aviez-vous procédé pour venir en aide à votre famille?  1= Faire un transfert d'argent 2= Aller rendre visite à la famille pour l'assister 3= Envoyer de l'aide par l'intermédiaire de quelqu'un
	2016				
2015					
2014					
2013					
2012					

Liste des chocs	Code culture
1. Sécheresse	1= Mil
2. Inondation	2= Mais
3. Pluies hors saison	3= Sorgho
4. Pause pluviométrique répétée	4= Riz
5. feux de brousse	5= Fonio
6. Invasion de criquets	6= Coton
7. Invasion aviaire	7= Autres à préciser
8. Invasion de sauteriaux	
9. Maladies (Parasitismes)	
10. Divagation des animaux	
11. Vol (de la production)	
12. Autres (préciser)	

## VI- Willingness to Pay

6.0.a Laquelle de ces cultures de bases suivantes est la plus importante pour vos parents au village en terme de production ?

1= maïs 2= riz 3=mil 4=sorgho 5= haricot/Niébé 6= arachide   

6.0. b Quelle a été la taille de la plus grande superficie allouée à la culture de [culture] sur les 5 dernières années?  
 Ha

6.1 Quelle a été l'année (Année A) la plus récente au cours de laquelle l'on a enregistré le plus de pluie dans votre village d'origine durant la saison agricole (Mai – Septembre) pour la surface de [culture]?

6.1.1 En cette année A, aviez-vous reçu une demande d'assistance de la part de votre ménage d'origine au village ? 1=Oui 2=Non

6.1.2 Si oui, aviez-vous répondu favorablement ? 1=Oui 2=Non

6.2. Quelle a été l'année (Année B) la plus récente au cours de laquelle l'on a enregistré le moins de pluie dans votre village d'origine durant la saison agricole (Mai – Septembre) pour la surface de [culture]?

6.2.1 En cette année B, aviez-vous reçu une demande d'assistance de la part de votre ménage d'origine au village ? 1=Oui 2=Non

6.2.2 Si oui, aviez-vous répondu favorablement ? 1=Oui 2=Non



Enquêteur : Veuillez veuillez montrer les schémas suivants

au répondant



et lui expliquer  correspond à l'abondance de pluie que vous avez reçue à l'année A et que  correspond au manque de pluie que vous avez constaté à l'année B.



correspond

Pour la suite ces images seront utilisées pour indiquer le niveau de pluie tombée dans votre village d'origine. Le nombre de gouttes représente la quantité de pluie, plus il y a de gouttes plus il y a eu de la pluie.



Si  correspond à l'abondance de pluie que vous avez reçue à l'année A et que  correspond au manque de pluie que vous avez constaté à l'année B, alors qu'elle a été la quantité de pluie observée lors des 3 dernières années.

Enquêteur, placer l'ensemble des cartes devant l'année en question afin que le répondant choisisse celle qui lui semble correspondre. Il faut avoir plusieurs copies de chaque carte.

Années	6.2.3 Placer la carte qui correspond	6.2.4 En cette année, avez-vous reçu une demande d'assistance de la part de votre ménage d'origine au village ?	6.2.5 Si oui, avez-vous répondu favorablement ?
2016			
2015			
2014			

6.2.6 Etant donné les pluies des saisons passées et les différents signes que vous pouvez observés, indiquez, en répartissant ces 10 billes dans les cases ci-dessous, combien êtes-vous sûre que la pluie sera suffisante cette année dans votre d'origine. Plus vous pensez que vous aurez suffisamment de pluie plus vous mettrez de billes dans cette case et vice versa. Et si vous êtes indécis (vous pensez qu'il y a autant de chance d'avoir de pluie comme de ne pas en avoir) alors mettez un nombre égal de bille dans les deux cases.



ou plus



ou moins

#### Section A : Introduction au contrat d'assurance

Supposons à présent qu'une institution de la place, pour vous aider à couvrir les risques de sécheresse ou de mauvaise pluviométrie d'un de vos parents au village, vous propose le contrat suivant:

Contrat (à lire attentivement)

Station Météo

- Il y a une station météo à côté du village de ce parent.
- La quantité de pluie enregistrée dans cette station est mesurée chaque jour.
- la quantité d'eau tombée dans le champ du parent est similaire à celle enregistrée au niveau de la station météo mais elle ne lui est pas toujours égale, il est possible qu'il y ait une légère différence entre la quantité d'eau tombée dans son champ et celle enregistrée au niveau de la station météo. Il existe une structure tierce, indépendante qui déclenche oui ou non l'indemnisation.

#### Description de la politique de couverture de risque

Vous devez payer une prime annuelle pour souscrire à cette politique de couverture de risque. Après que vous payez la prime, alors vous pouvez faire profiter à ce parent au village des avantages de cette politique après la période des récoltes.

Si vous ne souscrivez pas à cette politique, votre parent au village ne bénéficiera d'aucune couverture de risque. Par exemple en cas de mauvaises récoltes dues à une mauvaise pluviométrie aucune somme ne lui sera versée pour compenser cette perte.

La compensation peut être partielle ou totale. En fonction de la valeur du capital que vous assurez, une somme de compensation vous sera versée pour un niveau de seuil de pluie fixé par une institution tierce indépendante.

Supposons que vous assurez un capital de 25.000FCFA/ ha pour le compte de votre parent au village et que le seuil de quantité de pluie fixée par cette institution tierce est de 150mm, vous payerez une prime annuelle de 2000FCFA et en plus si la quantité d'eau recueillie au niveau de votre village calculée à base de l'indice

météorologique, est inférieure ou égale à 150mm. Cela signifie qu'il y a eu manque de pluie (). Dans ces conditions, à la fin de la saison de récolte votre parent sera indemnisé à hauteur de 25000 FCFA si l'indemnisation est totale ou une partie de 25000FCFA si l'indemnisation est partielle. Mais le fait que l'indemnisation soit totale ou partielle dépendra de la gravité du sinistre.

La compensation ou non sera basée sur la quantité d'eau enregistrée au niveau du village et non la quantité d'eau tombée dans le champ de votre parent. La quantité d'eau tombée dans votre champ peut être plus ou moins que

celle enregistrée au niveau du village. Par exemple, si la quantité de pluie enregistrée au village est , la

quantité de pluie tombée dans votre champ peut être  ou encore peut être  ou aussi .

6.3 Pensez-vous avoir bien compris ce contrat ? 1= Oui → 7.5 2= Non

6.4 Enquêteur, reprendre l'explication du contrat et reposer la question 7.7 par la suite.

6.5 Enquêteur, veuillez indiquer combien de fois avez-vous expliqué le contrat avant que le répondant le comprenne.  
----- nombre de fois

6.6 Que pensez-vous de ce contrat ?

1= Très intéressant

2= Intéressant

CODE:

3= Moins intéressant

4= Pas de sens

Enquêteur, poser les questions suivantes pour s'assurer que le répondant a bien saisi les explications du contrat.

Imaginer que vous ayez souscrit à la politique de couverture de risque que je vous ai expliqué plus haut.

6.7 Le niveau de pluie enregistré au niveau de la station météo est de 170mm (plus de  [montrer la carte]), alors est-ce-que dans ces conditions votre parent a-t-il droit à une indemnisation?

1= Oui 2= Non

6.8 Le niveau de pluie enregistré au niveau de la station météo est de 120mm (moins de  [montrer la carte]), alors est-ce-que dans ces conditions votre parent a-t-il droit à une indemnisation?

1= Oui 2= Non

6.9 Si oui, combien devriez-vous recevoir ? -----FCFA

6.10 Est-ce que vous pensez que la compensation se fait sur base de la quantité de pluie enregistrée au niveau du village ou la quantité de pluie tombée dans le champ de votre parent au village?

1=Dans son champ 2=Au niveau de la station 3= Les deux 4= Ne sais pas

#### Section B : WTP questions

Imaginez maintenant qu'en 2014 vous ayez assuré un capital de 50000 FCFA/Ha pour le compte de votre parent au village avant la saison agricole et qu'à la fin de la saison ce dernier a été indemnisé à hauteur de 50.000FCFA.

Imaginez que l'indemnisation vous soit remise et qu'ensuite vous devez la transférer à votre parent au village.

Imaginez que l'indemnisation soit directement remise à votre parent au village.

6.11 Alors comment vous vous sentiriez vous ?

1= Très content 2= Content 3= Indifférent 4= Je n'imagine pas que cela soit possible

Ces questions sont posées pour capter (mesurer) l'intention de paiement du répondant.

NB : Ici, l'on suppose que le capital assuré est de 25000FCFA/Ha

6.13 Accepteriez-vous payer 2000 FCFA comme prime annuelle pour faire bénéficier de la couverture de risque de mauvaise pluviométrie à votre parent ?

<p>1= Oui → 7.16    2= Non    CODE: <input type="text"/> 6.12 Si non, accepteriez-vous payer 1800 FCFA comme prime annuelle pour faire bénéficier de la couverture de risque de mauvaise pluviométrie à votre parent ?</p> <p>1= Oui → 7.16    2= Non    CODE: <input type="text"/></p> <p>6.14 Si non, accepteriez-vous payer 1600 FCFA comme prime annuelle pour faire bénéficier de la couverture de risque de mauvaise pluviométrie à votre parent ?</p> <p>1= Oui → 7.16    2= Non    CODE: <input type="text"/></p> <p>6.15 Si non, accepteriez-vous payer 1400 FCFA comme prime annuelle pour faire bénéficier de la couverture de risque de mauvaise pluviométrie à votre parent ?</p> <p>1= Oui → 7.16    2= Non    CODE: <input type="text"/></p> <p>6.16 Si non, alors quel est le plus grand montant auquel vous seriez prêt à payer comme prime annuelle pour faire bénéficier de la couverture de risque de mauvaise pluviométrie à votre parent ? ----- FCFA</p> <p>6.17 Etes-vous sûr des éléments de réponses que vous avez donné ?</p> <p>1= Très sûre 2= Sûre 3= Pas vraiment sûre    CODE: <input type="text"/></p> <p>6.18 Nous sommes à la fin de l'entretien. Merci d'avoir fourni toutes ces informations. Nous vous informons qu'il est possible que dans les jours à venir que l'on vous rappelle au téléphone pour une Contre-enquête (Back check). En outre, notre partenaire Planet Garantie vous contactera très prochainement pour une formation et une proposition de contrat d'assurance par la suite.</p>		
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Enquête rurale – Assurance agricole au Burkina Faso	7. ID du ménage	<input type="text"/>
	8. ID de la région	<input type="text"/>

### **INSTRUCTIONS A L'ENQUETEUR:**

Demander à parler avec le chef de ménage s'il est présent. Si non, demander à parler avec la personne qui peut vous renseigner sur la composition du ménage.

ATTENTION ! Le répondant doit obligatoirement faire partie du ménage. Ne prenez pas d'informations avec les voisins par exemple. .

**OFFICERS INFORMATION: Entrer le Nom et le Code**

9. Enquêteur	10. Editeur	11. Superviseur	12. Vérifié par
3.1 _____ 3.2 _____ _____ _____	4.1 _____ 4.2 _____ _____ _____	5.1 _____ 5.2 _____ _____ _____	6.1 _____ 6.2 _____ _____ _____

**RESULTATS DES VISITES**

Date de visite	_____ / _____ / 2017
13. Heure de début/Heure de fin	_____ : _____ / _____ : _____
14. Résultats des Visites  *Code pour les résultats: 1=Accomplie avec succès 2=Aucun membre compétent présent au moment de l'enquête 3=Ménage entier absent pour une longue durée 4=Refus (spécifier la raison) 5=Ménage non trouvé 7=Autre (spécifier)	Code: _____ Spécifier si réponse=4 ou 5: _____ _____

**I. Informations du questionnaire**

1.1 Région administrative	1. Boucle de Mouhoun 2. Cascades	CODE: _____
1.2 Province (Voir les Codes des	_____	CODE: _____

provinces)		
1.3 Département /Commune		CODE: ____   ____
1.4 Village		CODE: ____   ____
1.5 COORDONNEES GPS du ménage	a. LATITUDE: <b>S/N</b> ____ ° ____ , ____ b. LONGITUDE : <b>E/W</b> ____ ° ____ , ____	c. ALTITUDE: ____ . ____ Mètres au dessus du niveau de la mer d. PRECISION: ____ METER
1.6 Prénom du répondant		
1.7 Nom du répondant		
1.8 Relation vis-a-vis du chef de ménage	Voir code relation	
1.9 Avez-vous un numéro de téléphone où l'on peut vous joindre ?	1=Oui 2=Non	
1.10 Numéro de téléphone		
1.11 Enquêteur : enregistrer tous les numéros qui s'appliquent		

## II. Informations sur le ménage

1.12 Quelle est la religion du chef de ménage ?	1=Sans religion 2=Musulman 3=Catholique 4=Protestant 5=Traditionnel/animiste	CODE: ____   ____
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	6=Autre, specifier	
1.13 Quel est l'age du chef de ménage ?	_____	
1.14 Quel est le niveau d'éducation du chef de ménage ?	1= Aucun 2= Ecole franco Arabe 3= Niveau primaire 4= Niveau secondaire 5= Niveau supérieur <b>6= Autre à préciser</b>	CODE: _____
1.15 Quelle est la langue principale parlée dans le ménage ?	1=Bobo /bwaba/bawmou 2=Dagari 3=Dioula/ Bambara 4=Fulfuldé/peulh 9=Touareg/Bella	5=Gourmantché 6=Gourounsi 7=Lobi/Birifor 8=Mossi Sénooufo 96= Autre groupe ethnique (à préciser)
1.16 Le chef de ménage est-il originaire de ce village ?	1= Oui → 1.20 2= Non	CODE: _____
1.17 De quel village est il originaire ?	_____	
1.18 Depuis combien d'années le chef de ménage est il installé ici ?	_____ ans	

### **III- Liste des membres du ménage**

Je voudrais connaître l'âge, le sexe, l'état matrimonial, le niveau d'éducation et la relation avec le chef de ménage de chacun des membres de ce ménage qui y résident actuellement.

3.0 Combien de membres votre ménage compte actuellement (ceux qui sont pour la plupart du temps au sein du ménage)?

Numéro	3.1 Donner le nom et prénom du membre de famille.	3.2 Quel est le sexe de [Nom]?	3.3 Quel est l'âge de [Nom]?	3.4 Quel est l'état matrimonial de [Nom]?	3.5 Quel est le niveau d'éducation de [Nom]?	3.6 Quelle relation existe-t-elle entre [Nom] et le chef de ménage?	3.7 Quelle est l'occupation principale de [Nom]? Voir code occupation	3.8 [Nom] est il propriétaire d'une parcelle? 1=Oui 2=Non
1								
2								
3								
4								
5								

#### IV- Informations sur les Migrants

Nous allons, dans cette section demander les informations relatives à tous les membres de votre ménage qui ont quitté le ménage pour s'installer ailleurs.

4.0 Il y a t-il des membres de votre ménage qui ont quitté ce village pour s'installer ailleurs? 1=Oui 2= Non      Section V

Numéro	4.1 Donner les noms et Prénoms des membres du ménage qui ont quitté le village.	4.2 Quel est le sexe de [Nom]?	4.3 Quel est le lien entre [Nom] et le chef de ménage?	4.4 Est-ce que [Nom] vous soutient souvent financièrement en cas de besoin quelconque? 1=Oui 2= Non	4.5 Quelles sont les raisons de migration de [Nom]?	4.6 Quelle a est l'occupation principale de [Nom] ? Voir code	4.7 Est-ce [Nom] a des Biens ou investissements quelconques dans le village? 1=Oui 2= Non	4.8 Quel est le niveau d'éducation atteint par [Nom]?	4.9 Où est-ce que [Nom] réside actuellement?	4.10 Dans quel quartier de Ouagadougou réside [Nom] actuellement?	4.11 Quel est le nom du service dans lequel [Nom] travaille à Ouagadougou?	Si 4.9 est égal à 1		
												Tél 1	Tél 2	Tél3
1														
2														
3														

#### CODES

<u>Code sexe</u> Masculin=1 Féminin=2	<u>Code occupation</u> 1=Agriculteur 2=Maçon 3=Fermier 4=Eleveur 5=Chasseur 6=Menuisier 7=Tailleur 8=Mécanicien 9=Forgeron 10=Tisserand 11=Dolotière 12=Filleuse de coton 13=Autre à préciser	<u>Code lien de parenté</u> 1=Epouse/ Epoux 2=Fille/Fils 3=Belle-fille/Beau-fils 4=Sœur/Frère 5=Belle-sœur/Beau-fils 6=Cousin/Cousine 7=Nièce/Neveu 8=Petite-fille/Petit-fils 9=Petite-fille/petit-fils non biologique (Grandchild-in-law) 10=Oncle/Tante 11=Maratre/petite maman 98=Autre (spécifier)
<u>Code Etat matrimonial</u>  1=Jamais marié(e) 2=Mariée (traditionnel, religieux ou civil) 3=Concubinage 4=Veuve 5=Divorcée 6=Ne vit plus avec son conjoint/Séparée 7=Autre, spécifier		
<u>Code religion</u>  1=Sans religion 2=Musulman 3=Catholique 4=Protestant 5=Traditionnel/animiste 6=Autre, spécifier	<u>Code niveau d'éducation</u>  1= Aucun 2= Ecole franco Arabe 3= Niveau primaire 4= Niveau secondaire 5= Niveau supérieur 6= Autre à préciser	<u>Code raison de migration</u>  1= raisons d'études 2= raisons de travail 3= problèmes de famille 4= autres raisons
	<u>Code lieu de résidence actuel</u>  1= dans le Village 2= Ouagadougou 3= Autre village en milieu rural 4= Autre ville en milieu urbain 5= A l'extérieur du pays	

<u>Code sexe</u> Masculin=1 Féminin=2	<u>Code occupation</u>  1=Agriculteur 2=Maçon 3=Fermier 4=Eleveur 5=Chasseur 6=Menuisier 7=Tailleur 8=Mécanicien 9=Forgeron 10=Tisserand 11=Dolotière 12=Filleuse de coton 13= Travaille dans la fonction publique 14= Travail dans le secteur privé 15=Autre à préciser	<u>Code lien de parenté</u>  1=Epouse/ Epoux 2=Fille/Fils 3=Belle-fille/Beau-fils 4=Sœur/Frère 5=Belle-sœur/Beau-fils 6=Cousin/Cousine 7=Nièce/Neveu 8=Petite-fille/Petit-fils 9=Petite-fille/petit-fils non biologique (Grandchild-in-law) 10=Oncle/Tante 11=Maratre/petite maman 98=Autre (spécifier)
<u>Code Etat matrimonial</u> 1=Jamais marié(e) 2=Mariée (traditionnel, religieux ou civil) 3=Concubinage 4=Veuve 5=Divorcée 6=Ne vit plus avec son conjoint/Séparée 7=Autre, spécifier	<u>Code niveau d'éducation</u> 1=Aucun 2=Ecole franco Arabe 3=Niveau primaire 4=Niveau secondaire 5=Niveau supérieur 6=Autre à préciser	<u>Code raison de migration</u> 1= raisons d'études 2= raisons de travail 3= problèmes de famille 4= autres raisons

## V- Réseau de solidarité

**5.0** Est-ce qu'il est arrivé une fois au cours des 03 dernières années que vous fassiez des transactions d'argent avec quelqu'un d'autre ?

1= Oui 2= Non → Section VI

### V.1- Transfert reçu (flux entrants)

Numéro	5.1 Lister les personnes avec lesquelles vous avez reçu des transferts durant ces 03 dernières années.	5.2 Est-ce que [Nom] a été déjà cité dans la section précédente sur les migrants ? 1= Oui 5.10 → 2= Non	5.3 Quel est le lien de parenté entre vous et [Nom] ? 1=Epouse/ Epoux 2=Fille/Fils 3=Belle-fille/Beau-fils 4=Sœur/Frère 5=Belle-sœur/Beau-fils 6=Cousin/Cousine 7=Nièce/Neveu 8=Petite-fille/Petit-fils 9=Petite-fille/petit-fils non biologique (Grandchild-in-law) 10=Oncle/Tante 11=Maratre/petite maman 12= Aucun lien de parenté 98=Autre (spécifier)	5.4 Ou est ce que réside [nom] actuellement ? Voir code lieu de résidence actuel  1= dans le Village 2=Ouagadougou 5.7 3= Autre village en milieu rural → 5.12 4= Autre ville en milieu urbain → 5.12 5= A l'extérieur du pays 5.12 →	5.5 Donner le nom du chef de ménage de [Nom]  Enquêteur, enregistrer le ID du ménage correspondant →	5.6 Enquêteur, veillez saisir le ID du ménage correspondant à base de l'enquête recensement des ménages. →	5.7 Si [Nom] réside à Ouagadougou, Dans quel quartier de Ouagadougou réside [Nom] actuellement?	5.8 Quel est le nom du service dans lequel [Nom] travaille à Ouagadougou?	5.9 Pouvez vous nous donner les contacts téléphoniques de [Nom]?	5.10 Enquêteur, veillez saisir le ID correspondant à cette partie dans la section IV.	5.11 Donner la valeur totale des montants reçus ces 03 dernières années	5.9 Si [Nom] réside à Ouagadougou, SVP pouvez vous nous passer ces contacts téléphoniques ?  Tél 1      Tél 2
Tel1	Tel2	Tel3										
1											2016	
											2015	
											2014	
2											2016	
											2015	
											2014	

## V.2- Transferts faits (flux sortants)

Numéro	5.12 Lister les personnes avec lesquelles vous avez reçu des transferts durant ces 03 dernières années.	5.13 Est-ce que [Nom] a été déjà cité dans la section précédente sur les migrants ? 1= Oui → 2= Non	5.14 Quel est le lien de parenté entre vous et [Nom] ? 1=Épouse/Epoux 2=Fille/Fils 3=Belle-fille/Beau-fils 4=Sœur/Frère 5=Belle-sœur/Beau-fils 6=Cousin/Cousine 7=Nièce/Neveu 8=Petite-fille/Petit-fils 9=Petite-fille/petit-fils non biologique (Grandchild-in-law) 10=Oncle/Tante 11=Maratre/petite maman 12=Aucun lien de parenté 98=Autre (spécifier)	5.15 Ou est ce que réside [nom] actuellement ?  Voir code lieu de résidence actuel 1= dans le Village 2=Ouagadougou 5.17 3= Autre village en milieu rural Section VI 4= Autre ville en milieu urbain Section VI 5= A l'extérieur du pays Section VI	5.16 Donner le nom du chef de ménage de [Nom]  Enquêteur, enregistrer le ID du ménage correspondant à base de l'enquête recensement des ménages	5.17 Enquêteur, veillez saisir le ID du ménage correspondant à base de l'enquête recensement des ménages	5.18 Si [Nom] réside à Ouagadougou, Dans quel quartier de Ouagadougou réside [Nom] actuellement?	5.19 Quel est le nom du service dans lequel [Nom] travaille à Ouagadougou?	5.20 Pouvez nous nous donner les contacts téléphoniques de [Nom]?	5.21 Enquêteur, veillez saisir le ID correspondant à cette partie dans la section IV.  5.22 Donner la valeur totale des montants envoyés ces 03 dernières années	Transferts envoyés			5.9 Si [Nom] réside à Ouagadougou , SVP pouvez nous nous passer ces contacts téléphoniques ?
1										2016				
										2015				
										2014				
2										2016				
										2015				
										2014				

## VI- Risques agricoles et climatiques

**Enquêteur :** pour chacun des chocs X, poser l'ensemble des questions ci-dessous.

<b>Années</b>	6.1 Quels ont été les 03 principaux chocs que votre ménage a vécu durant ces 05 dernières années ? [Choisir au plus 03 chocs]. <i>Voir code chocs</i>	6.2 Quelles sont les 03 principales cultures qui ont été frappées par ce [choc]? [Choisir au plus 03 cultures]. <i>Voir code cultures</i>	6.3 Quelle est l'estimation de la perte subie à cause de ce [choc] en termes d'argent?	6.4 Comment avez-vous fait pour compenser cette perte du à ce type de [choc] X ? <i>Voir code Mode de compensation</i>	6.5 Si vous avez reçu de l'aide de la part d'une tierce personne , pouvez-vous nous donner son nom ?	6.6 Est-ce que [Nom] a déjà mentionné dans les sections précédentes (IV et V )? 1= Oui 2= Non	6.7 Si oui, <b>Enquêteur</b> veillez enregistrer le numéro correspondant à [Nom] dans la section IV ou V	6.8 Quel est le lien entre [Nom] et le chef de ménage ? <i>Voir code lieu de résidence actuel</i>	6.9 Ou est-ce que [Nom] réside actuellement ? <i>Voir Code relation</i> Tel 1	6.10 Si [Nom] réside à Ouagadougou, dans quel quartier de Ouagadougou réside t-il actuellement ? <i>Voir code quartier</i>	6.11 Quel est le nom du service dans lequel [Nom] travaille à Ouagadougou ? <i>Voir code service</i>	6.12 Si [Nom] réside à Ouagadougou, <b>Pouvez vous nous donner les contacts téléphoniques de [Nom]?</b> <i>Voir code contacts</i>
										Tel1	Tel2	Tel3
2016	Choc 1											
	Choc 2											
	Choc 3											
2015	Choc 1											
	Choc 2											
	Choc 3											
2014	Choc 1											
	Choc 2											
	Choc 3											
2013	Choc 1											
	Choc											

Tel 2

	2														
	Choc 3														
	Choc 1														
	Choc 2														
2012	Choc 3														

Liste des chocs	Code culture	Code mode de compensation
<p>1. Sécheresse          2. Inondation          3. Pluies hors saison          4. Pause pluviométrique répétée          5. feux de brousse          6. Invasion de criquets          7. Invasion aviaire          8. Invasion de sauteriaux          9. Maladies (Parasitismes)          10. Divagation des animaux          11. Vol (de la production)          12. Autres (préciser)</p>	<p>1= Mil          2= Mais          3= Sorgho          4= Riz          5= Fonio          6= Coton          7= Autres à préciser</p>	<p>1= Rien          2= Emprunter de l'argent avec un ami          3= Recevoir de l'argent de la part d'un parent          4= Contracter une dette auprès d'une institution de la place          5= Bénéficier de la couverture du risque par l'assureur  <b>6= Autre à préciser</b></p>

## VII- Willingness to Pay

7.0.a Laquelle de ces cultures de bases suivantes est la plus importante pour votre ménage en terme de production ?

1= mais 2= riz 3=mil 4= sorgho 5= haricot/Niébé 6= arachide   

7.0.b Quelle a été la taille de la plus grande superficie allouée à la culture de [culture] ?  Ha

	Année	Imaginer que cette surface a été entièrement consacrée à la culture de [culture] c'est-à-dire qu'il n'y a pas de culture mixte. Que serait la quantité de [culture] cultivée sur cette surface ?
7.1 Souvenez-vous de la dernière saison agricole 2016 et à la quantité de pluie que vous avez reçu durant cette saison (de Mai 2016 à Septembre 2016).	2016	
7.2 Quelle a été l'année la plus récente au cours de laquelle l'on a enregistré le plus de pluie durant la saison agricole (Mai – Septembre) pour la surface de [culture]? Si c'est 2016, enregistrer 2016 et aller à la question 7.2	A	
7.3 Quelle a été l'année la plus récente au cours de laquelle l'on a enregistré le moins de pluie durant la saison agricole (Mai – Septembre) pour la surface de [culture]? Si c'est 2016, enregistrer 2016 et aller à la question 7.3	B	

Enquêteur : Veuillez utiliser les schémas suivants



et placer  en A et  en B.



7.4 Si correspond à l'abondance de pluie que vous avez reçue à l'année A et que l'année B, alors quelle a été la quantité de pluie observée lors des 3 dernières années.



correspond au manque de pluie que vous avez constaté à

**Enquêteur**, placer l'ensemble des cartes devant l'année en question afin que le répondant choisisse celle qui lui semble correspondre. Il faut avoir plusieurs copies de chaque carte.

Années	Placer la carte qui correspond	Quelle a été quantité de [culture] cultivée avec ce niveau de pluie ?
2016		
2015		
2014		

7.5 Y a-t-il des signes (par exemple, la température, le comportement des animaux, la pluie reçue au cours des années précédentes) qui vous donnent une idée sur le niveau de la pluviométrie dans votre village pour cette saison (Juin - Septembre 2017) ?

1= Oui    2= Non → Section A

7.6 Etant donné les pluies des saisons passées et les différents signes que vous pouvez observés, indiquez, en plaçant des billes dans les cases ci-dessous, combien êtes-vous sûre que la pluie sera suffisante cette année. Plus vous pensez que vous aurez suffisamment de pluie plus vous mettrez de billes dans cette case et vice versa. Et si vous êtes indécis (vous pensez qu'il y a autant de chance d'avoir de pluie comme de ne pas en avoir) alors mettez un nombre égal de bille dans les deux cases.

ou plus	ou moins

#### Section A : Introduction au contrat d'assurance

Maintenant supposons qu'une institution de la place, pour vous aider à couvrir vos risques de sécheresse ou de mauvaise pluviométrie, vous propose le contrat suivant:

Contrat (*à lire attentivement*)

## Station Météo

- Il y a une station météo à coté de votre village.
- La quantité de pluie enregistrée dans cette station est mesurée chaque jour.
- la quantité d'eau tombée dans votre champs est similaire à celle enregistrée au niveau de la station météo mais elle ne lui est pas toujours égale, il est possible qu'il ait une légère différence entre la quantité d'eau tombée dans votre champs et celle enregistrée au niveau de la station météo. Il existe une structure tierce, indépendante qui déclenche oui ou non l'indemnisation.

### Description de la politique de couverture de risque

Vous devez payer une **prime annuelle** pour souscrire à cette politique de couverture de risque. Après que vous payez la prime, alors vous pouvez profiter des avantages de cette politique après la période des récoltes.

Si vous ne souscrivez pas à cette politique, vous ne bénéficierez d'aucune couverture de risque. Par exemple en cas de mauvaises récoltes dues à une mauvaise pluviométrie aucune somme ne vous sera versée pour compenser cette perte.

La compensation peut être partielle ou totale. En fonction de la valeur du capital que vous assurez, une somme de compensation vous sera versée pour un niveau de seuil de pluie fixé par une institution tierce indépendante.

Supposons que vous assurez un capital de 25.000FCFA/ ha et que le seuil de quantité de pluie fixée par cette institution tierce est de 150mm, vous payerez une prime annuelle de 2000FCFA et en plus si la quantité d'eau recueillie au niveau de votre village calculée à base de l'indice météorologique, est inférieure ou égale à 150mm. Cela signifie qu'il y a eu manque de pluie (). Dans ces conditions, à la fin de la saison de récolte vous serez remboursé à hauteur de 25000 FCFA si l'indemnisation est totale ou une partie de 25000FCFA si l'indemnisation est partielle. Mais le fait que l'indemnisation soit totale ou partielle dépendra de la gravité du sinistre.

La compensation ou non sera basée sur la quantité d'eau enregistrée au niveau du village et non la quantité d'eau tombée dans votre champs. La quantité d'eau tombée dans votre champ peut être plus ou moins que celle enregistrée au niveau du village. Par exemple, si la quantité de pluie

enregistrée au village est , la quantité de pluie tombée dans votre champ peut être  ou encore peut être  ou aussi  . [Enquêteur, montrer à chaque fois les images]

7.7 Pensez-vous avoir bien compris ce contrat ? 1= Oui → 7.9 2= Non

7.8 Enquêteur, reprendre l'explication du contrat et poser la question 7.7 par la suite.

7.9 Enquêteur, veuillez indiquer combien de fois avez-vous expliqué le contrat avant que le répondant le comprenne.  
nombre de fois -----

7.10 Que pensez-vous de ce contrat ?

1= Très intéressant

2= Intéressant

CODE: \_\_\_\_\_

3= Moins intéressant

4= Pas de sens

**Enquêteur**, poser les questions suivantes pour s'assurer que le répondant a bien saisi les explications du contrat.

Imaginer que vous ayez souscrit à la politique de couverture de risque que je vous ai expliquée plus haut.

7.11 Le niveau de pluie enregistré au niveau de la station météo est de 170mm (plus de  [montrer la carte]), alors est-ce que dans ces conditions vous devriez être remboursés ? 1= Oui 2= Non

7.12.a Le niveau de pluie enregistré au niveau de la station météo est de 120mm (moins de  [montrer la carte]), alors est-ce que dans ces conditions vous devriez être remboursés ? 1= Oui 2= Non

7.12.b Si oui, combien devriez-vous recevoir ? -----FCFA

7.13 Est-ce que vous pensez que la compensation se fait sur base de la quantité de pluie enregistrée au niveau du village ou la quantité de pluie tombée dans votre champ ?

1=Dans mon champ 2=Au niveau de la station 3=Les deux 4=Ne sais pas

## Section B : WTP questions

Vous avez dit plus haut que la pluie a été insuffisante à l'année B [enquêteur, rappelez l'année]. Imaginez maintenant qu'en cette année B vous aviez signé avant la saison agricole un contrat de couverture de risque et qu'à la fin de la saison vous aviez été indemnisé à hauteur de 50.000FCFA.

7.14 Alors comment vous vous sentiriez vous ?

1= Très content 2= Content 3= Indifferent 4= Je n'imagine pas que cela soit possible

**Ces questions sont posées pour capter (mesurer) l'intention de paiement du répondant.**

**NB : Ici, l'on suppose que le capital assuré est de 25000FCFA/Ha**

7.15 Accepteriez-vous payer **2000 FCFA** comme prime annuelle pour bénéficier de la couverture de risque de mauvaise pluviométrie ?

1= Oui → 7.20      2= Non      CODE:                   

7.16 Si non, accepteriez-vous payer **1800 FCFA** comme prime mensuelle pour bénéficier de la couverture de risque de mauvaise pluviométrie ?

1= Oui → 7.20      2= Non      CODE:                   

7.17 Si non, accepteriez-vous payer **1600 FCFA** comme prime mensuelle pour bénéficier de la couverture de risque de mauvaise pluviométrie ?

1= Oui → 7.20      2= Non      CODE:                   

7.18 Si non, accepteriez-vous payer **1400 FCFA** comme prime mensuelle pour bénéficier de la couverture de risque de mauvaise pluviométrie ?

1= Oui → 7.20      2= Non      CODE:                   

7.19 Si non, alors quel est le plus grand montant auquel vous seriez prêt à payer comme prime mensuelle pour bénéficier de la couverture de risque de mauvaise pluviométrie ?

----- FCFA

7.20 Etes-vous sûr des éléments de réponses que vous avez donné ?

1= Très sûre 2= Sûre 3= Pas vraiment sûre

CODE:       

7.21 Nous sommes à la fin de l'entretien. Merci d'avoir fourni toutes ces informations. Pourriez-vous, SVP informer vos parents qui ont migré à Ouagadougou et dont vous avez mentionné leurs noms lors de l'entretien, qu'il est probable (possible) que nous les rencontrions pour un autre entretien ?

1= Oui

2= Non

**INSTRUCTIONS A L'ENQUETEUR:**

Demander à parler avec le chef de ménage s'il est présent. Si non, demander à parler avec la personne qui peut vous renseigner sur la composition du ménage.

ATTENTION ! Le répondant doit obligatoirement faire partie du ménage. Ne prenez pas d'informations avec les voisins par exemple. .

**OFFICERS INFORMATION: Entrer le Nom et le Code**

17. Enquêteur	18. Editeur	19. Superviseur	20. Vérifié par
3.1 _____ 3.2 _____	4.1 _____ 4.2 _____	5.1 _____ 5.2 _____	6.1 _____ 6.2 _____

**RESULTATS DES VISITES**

Date de visite	_____ / _____ / 2017
21. Heure de début/Heure de fin	_____ : _____ / _____ : _____
22. Résultats des Visites  *Code pour les résultats: 1=Accomplie avec succès 2=Aucun membre compétent présent au moment de l'enquête 3=Ménage entier absent pour une longue durée 4=Refus (spécifier la raison) 5=Ménage non trouvé 7=Autre (spécifier)	Code: _____ Spécifier si réponse=4 ou 5: _____ _____

**III. Informations du questionnaire**

1.19 Région administrative	1. Boucle de Mouhoun 2. Cascades	CODE: _____
1.20 Province (Voir les Codes des provinces)	_____	CODE: _____
1.21 Département /Commune	_____	CODE: _____
1.22 Village	_____	CODE: _____
1.23 COORDONNES GPS du ménage	a. LATITUDE: <b>L</b> S/ <b>N</b> <b>°</b> _____ , _____ b. LONGITUDE: <b>E</b> <b>°</b> _____ , _____	c. ALTITUDE: <b>°</b> _____ . Mètres au dessus du niveau de la mer

	<input type="text"/> , <input type="text"/> ,	d. PRECISION: METER <input type="text"/>
1.24 Prénom du répondant	<input type="text"/> <input type="text"/>	
1.25 Nom du répondant	<input type="text"/>	
1.26 Relation vis-a-vis du chef de ménage	Voir code relation	
1.27 Avez-vous un numéro de téléphone où l'on peut vous joindre ?	1=Oui 2=Non	
1.28 Numéro de téléphone 1.29 Enquêteur : enregistrer tous les numéros qui s'appliquent		
1.12 Enquêteur, veillez enregistrer le ID du ménage. [ pour le ième ménage que vous visitez, mettez le numéro i comme numéro d'ordre.		

#### IV. Informations sur le ménage

1.13 Quelle est la religion du chef de ménage ?	1=Sans religion 2=Musulman 3=Catholique 4=Protestant 5=Traditionnel /animiste 6=Autre, spécifier	CODE: <input type="text"/> <input type="text"/>
1.14 Quel est l'âge du chef de ménage ?	<input type="text"/>	
1.15 Quel est le niveau d'éducation du chef de ménage ?	1= Aucun 2= Ecole franco Arabe 3= Niveau primaire 4= Niveau secondaire 5= Niveau supérieur <b>6= Autre à préciser</b>	CODE: <input type="text"/> <input type="text"/>
1.16 Quelle est l'ethnie du chef de ménage ?	1= Kassena... 11= Bissa 2= Lele 12= Dagari 3= Nouni 13= Lobi	5= Yana 16= Sonraï 6=Mossi 17= Tuareg 7= Bwa 4= Nankana/Farfarse

	8=Peulh 9= Samo 15= Turka 96= Autre groupe ethnique (à préciser)	14= Goin 10= Gourmantche	
1.17 Quel est le sous-groupe ethnique/caste du chef de ménage ?	1= Forgerons 2= Captifs 4= Chasseur 96= Autre sous groupe ethnique (à préciser)	3= Descendants de captifs 5= Lignée du chef de terre 2= Nobles 6= Griot	
1.18 Le chef de ménage est il originaire de ce village ?	1= Oui → 2= Non	1.19	CODE: _____ __
1.19 De quel village est il originaire ?			
1.20 Depuis combien d'années le chef de ménage est il installé ici ?	____ ans		

### III- Biens du ménage

3.1 Cultivez-vous sur vos propres terres ?      1=Oui    2= Non      CODE: \_\_\_\_\_

3.2 Votre ménage a-t-il en sa possession des terres dans un bas-fond ?    CODE:  
\_\_\_\_\_

3.3 Est - ce- que votre ménage possède du bétail, troupeau ou des animaux de ferme?

1=Oui    2= Non      CODE: \_\_\_\_\_

3.4 Si oui, lesquels des animaux suivants votre ménage possède-t-il ?

1= Bœufs

2= Animaux de trait

3= Ovins/caprins

4= Volaille

3.5 Il y-a t-il au sein de votre ménage des maisons dont le toit est en tôle ?

1=Oui    2= Non      CODE: \_\_\_\_\_ [enquêteur, enregistrer la réponse après observation]

3.6 Il y-a t-il au sein de votre ménage des maisons dont le mur est en briques de terre/brique de ciment ?

1=Oui    2= Non      CODE: \_\_\_\_\_ [enquêteur, enregistrer la réponse après observation]

3.7 Il y-a t-il au sein de votre ménage des maisons dont le sol est en ciment ?

1=Oui 2= Non                    CODE:  [enquêteur, enregistrer la réponse après observation]

3.8 Avez-vous au moins un parent qui peut vous venir en aide et qui est installé à Ouagadougou ?

1=Oui 2= Non                    CODE:

3.9 Comment les contactez-vous en cas de besoin ?

1= Par téléphone

2= Visite

3= Lettre écrite/poste

4= Colis à travers les compagnies de voyage

CODE:

5= Autre à préciser

3.10 Combien de membres votre ménage compte actuellement (ceux qui sont pour la plupart du temps au sein du ménage)?

3.11 Combien d'enfants de moins de 15 ans compte votre ménage ?

3.12 Combien d'hommes de plus de 15 ans compte votre ménage ?

3.13 Combien de femmes de plus de 15 ans compte votre ménage ?

Merci pour votre aimable collaboration. Il est probable que votre ménage soit choisi de façon aléatoire pour une enquête dans les prochains jours.