



Spillovers from off-farm self-employment opportunities in rural Niger

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In 2012, with support of the UK Department for international Development (DfID or UK Aid) and the International Development Research Centre (IDRC) of Canada, PEP launched a new program to support and build capacities in "Policy Analyses on Growth and Employment" (PAGE) in developing countries.

This brief summarizes the main features and outcomes of one of the projects supported under the 2nd round of the PAGE initiative (2014-2015).

Local researchers aim to understand the causes of increasing off-farm self-employment opportunities, and to assess the effects on agriculture and food security in rural Niger

Farm and off-farm issues in rural Niger

The agricultural sector is the main economic activity in peri-urban and rural Niger. Yet, farm households still face constraints related to climate change and agricultural factors that may hinder agricultural production and threaten food security.

Food insecurity is an agriculture-related issue and recurrent issue in Niger. A nationally-representative survey on the vulnerability of households to insecurity (Enquête Nationale sur les Conditions de Vie des Ménages et l'Agriculture - ECVMA) - conducted in 2011 by the National Institute of Statistics (INS), indicated that 34.9% of surveyed households were "food insecure".

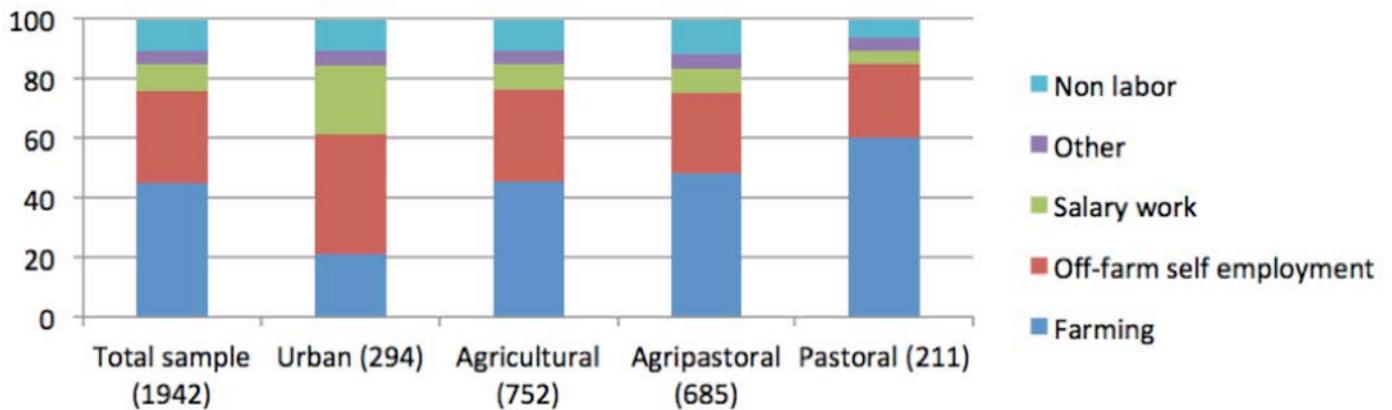
The Government's new "3N initiative" (Nigériens Nourishing Nigériens) attempts to address these concerns through the support of sustainable agricultural development and food security. This initiative focuses on creating conditions conducive to dealing with all risks of nutrition or food insecurity, and to ensuring that the agricultural sector is a vector of social transformation and economic growth.

Another reality observed in rural Niger is a lack of formal and decent wage employment, leading to rural exodus - mainly for young people. The National Employment Promotion Agency shows that unemployed people struggle to integrate the labor market, and generally blame the absence of good linkages between the labor market, vocational training, and policies to support entrepreneurship.



Still, low-skilled self-employment continues to be the most accessible in terms of "off-farm work opportunities" to the households in rural areas (see Figure 1, on page 2). Data from the ECVMA-2011 survey reveals that more than 50% of farm households are involved in an off-farm non-salaried employment. And this will be even more likely in the future, as part of the farm household's livelihood strategy to diversify income sources.

As an important route out of poverty, there is new interest in promoting the development of the rural off-farm economy, as a source of growth in agricultural-based countries. The main challenge for policy interventions in rural Niger is thus to promote this type of off-farm employment while, at the same time, enhancing agricultural production and improving food security.

Figure 1: Share of total farm households' income from different sources, by agro ecological zones

Employment policy often receives more attention in urban areas, while agricultural policy is mainly intended for rural areas. However, as rural households in Niger become more diversified by involving in non-farm activities, market imperfections may cause positive or negative interdependencies between farm and off-farm sectors.

Interventions intended for the rural area that ignore the nature of these linkages may be misleading. The potential presence of conflicting objectives - in which case the promotion of the non-farm sector may compromise the performance of the farming sector - remains an important policy issue in rural Niger.

Many studies led in similar contexts - of market imperfections, as in Niger - have stressed the

importance of understanding the constraints faced by the rural non-farm sector, and their implications.

In light of the above, this study aims to:

- 1) analyze factors that determine farm households' decisions to involve in off-farm self-employment activities
- 2) estimate the effects of that decision on outcomes such as the households' agricultural decisions and food security.

The researchers seek to provide a better understanding of the causes and consequences of off-farm self-employment opportunities in the rural areas, as reliable evidence to inform policy.

Data and methodology

The researchers use data from the 2011 ECVMA survey, involving a sample of 1942 agricultural households, 63.34% of which had also participated in an off-farm self-employment activity. These activities are mostly individual non-agricultural enterprises - extractives, manufacturing, trading and services.

In terms of methodology, the researchers use the counterfactual framework - part of the impact evaluation literature - which allows to estimate the average difference between expected outcomes of the group of farm households that have participated in an off-farm self-employment activity, and expected outcomes of the same group of households, had they not participated in any such activity. The differential impact is also estimated for the group of farm households that have not participated in any off-farm self-employment activity.

The counterfactual framework jointly models the households' "participation decision" with the outcome equations, i.e. the response to that decision. Agricultural outcomes are defined as expenditure for purchased inputs and for hired labor. Food security indicators are defined using the definitions of food accessibility, food availability and food utilization.

Key findings

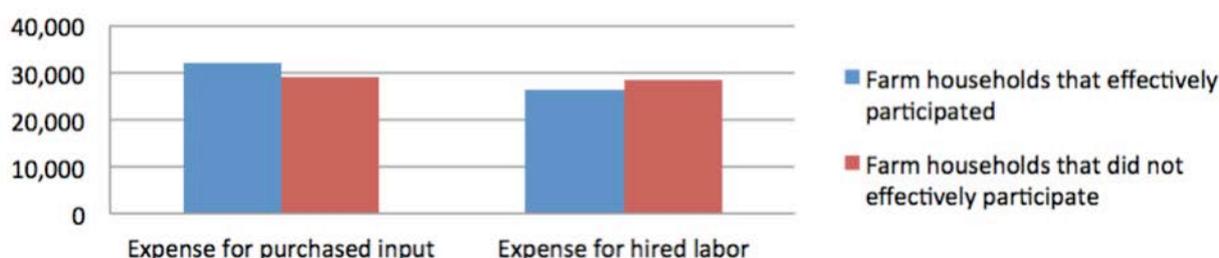
The results from the researchers' analysis provide evidence on the causes (or determinants to the decision) of participating in off-farm self-employment activities for farm households in rural Niger. Among those "push" factors are:

- Changes in prices of inputs and outputs, and constraints on land size and cereal bank - which suggests the existence of linkages between the farm and the non-farm sectors.
- Social relations, finance and proximity - suggesting that credit constraints, infrastructure and location are all entry barriers for farm households' to engage in off-farm self-employment in rural Niger.

In regards to the consequences of participating in off-farm self-employment activities, the researchers find that such participation contributes to:

- Increase, on average, agricultural expenses in purchased inputs and hired labor, while however decreasing the propensity to hire labor.
- Decrease food insecurity, but only through an increase in energy/kcal food consumption. Off-farm self-employment opportunities thus favor food accessibility, without having any additional effect on food availability and food utilization, as measured by the number of months in food gaps and diet diversity.

Figure 2: Average impact of participation in off-farm self-employment (FCFA)



Implications and recommendations for policy

As the empirical results show positive linkages between the farm and the non-farm sectors, it seems that there is scope to increase (or create favorable conditions for) the development of the non-farm sector in rural Niger. Based on their findings, the authors recommend for policy to:

- Encourage initiatives for the promotion of rural entrepreneurship
- Take into account the financial and infrastructure constraints that are entry barriers of farm households' participation in off-farm self employment.
- Aim to increase the level of technology and skills of rural dwellers, through training programs. As off-farm self-employment activities in rural Niger are predominantly low-skilled, this may also be beneficial to the rural non-farm sector.

Moreover, the researchers suggest that any programs aimed at promoting off-farm self-employment in rural areas should be combined, at least partly, with agricultural and social protection policies - as an alternative and cost-effective strategy for alleviating agricultural constraints while reducing food insecurity. For example:

- Ministries in charge of agricultural, employment and social protection policies may design and implement complementary programs intended for farm households, in line with the 3N initiative - aimed at reduce food insecurity through agricultural investments.
- The "warehouse receipt system" should receive more attention in that instance, as this system aims to ease credit access for farm households to undertake income-generating activities of which the profits can be used to purchase agricultural inputs.

This policy brief is based on the PEP project [PMMA-12668](#), carried out with scientific support from PEP and financial support from UK Aid and Canada's IDRC.

To find out more about the research methods and findings, read the [full paper](#) (forthcoming)