Title: On the impact of the lack of credit access on rural poverty in Morocco: analysis using an agricultural household model with credit constraints"

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ABSTRACT

In Morocco, as in other developing countries, poor households in rural areas are confronted with imperfect markets (missing markets, high transaction costs, constraints on traded quantities, etc.). One of the markets with the greatest imperfections in rural Morocco is the credit market. This market failure creates credit and liquidity constraints on household decisions, limiting their capacities to improve their wellbeing. These persistent constraints explain at least some of the chronic poverty in rural Morocco.

In his book on the peasant economy, Ellis (1993) defines a rural farmer as an economic entity which is "partially integrated into incomplete markets". Every effort to model the behaviour of these households must account for the ways in which this situation influences their decisions.

Given that rural household are systematically exposed to incomplete or failed markets, studying their behaviour must be done by formulating, estimating and/or calibrating and then solving non-separable models where decisions relating to consumption, production (*crops and livestock*) and participation in various markets are jointly make in response to these imperfections.

Household models are relatively new analytical tools (Singh, Squire and Strauss (1986), Sadoulet and de Janvry (1995), Bardhan and Udry (1999), Sadoulet (2000)).

In this paper, we explore these situations and construct a non-separable household model with the most realistic characteristics. We simultaneously model the joint decisions of the rural households (production processes of *crops and livestock*, factors and inputs demand, demand of goods and services, savings, labour supply (and demand for leisure), etc.). We explicitly integrate credit constraints in the model. We illustrate and explain the role and mechanism of access to credit in the context of a strategy to alleviate poverty in rural Morocco. The model is an extension of those constructed by De Janvry et al. (1992) and Abdelkhalek (2002). We also illustrate how the model can be linked with the results of a CGE model.

Keywords: Agricultural household models, Credit constraints, non-separability, poverty, Morocco

References:

Abdelkhalek, T., (2002), « De l'impact de la libéralisation du marché céréalier marocain : renseignements à partir d'un modèle de comportement des ménages ruraux », *Critique économique*, n° 7, pp : 59-85.

Bardhan, P. et Udry, Ch., (1995), Development Microeconomics, Oxford University Press.

¹ The study is a part of a broader research project being performed by the authors, which includes the construction of non-separable micro simulated household models with Moroccan survey data.

Bardhan, P., (1989), The economic theory of agrarian institutions, Clarendon Paperbacks.

Ellis, F., (1993), Peasant Economies: Farm Households and Agrarian Development, Cambridge University Press.

De Janvry, A. et Sadoulet, E. et Raki, M., (1992), «Structural adjustment and the peasantry in Morocco: A computable household model », Voir: www.erea.oxfordjournals.org.

Sadoulet, E., (2000), « Marchés imparfaits et modélisation des comportements des ménages paysans : où en sommes-nous ? », *Actualité économique*, vol. 76, n° 4, pp : 459-489.

Singh, I., Squire, L. et Strauss, J., (1986), *Agricultural Household Models: Extensions, Application and Policy*, Baltimore: Johns Hopkins University Press.