

ASSETS AND RURAL INCOME GENERATING ACTIVITIES. A CONCEPTUAL FRAMEWORK

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Abstract

This paper examines the links between the assets and the economic activities of rural households in developing countries to provide insight into how the promotion of certain key assets—particularly education, land and infrastructure—influences the economic choices of these households. The study indicates that improved land access is linked to agricultural production and thus will lead households to take, on average, this path for improving household welfare. Higher levels of education and greater access to infrastructure appear to be most closely linked to non-agricultural wage employment.

Key words: rural income, assets and economic activities of rural households

INTRODUCTION

Interventions designed to improve the well-being of rural households often focus on expanding asset ownership and access based on the view that it is the household's low asset position that limits its ability to take advantage of opportunities. Since assets determine the economic activities of a household in a given context, an intervention that improves a household's asset position is not likely to be path neutral; that is, such interventions are likely to promote participation in certain income generating activities and thus a particular path for improving household welfare.

The objective of this paper is to examine the links between the assets and the economic activities of rural households. The relationship between certain assets and the capacity of rural households to generate income from different activities might be country specific and depend largely on the particular cultural and historical context of the country as well as its current policies. Alternatively, the asset-activities relationship may depend on the country's level of development—as countries develop and shift away from agriculture and towards manufacturing and services the magnitude of the returns to assets may shift from one activity to another or may change for a given asset.

Previous studies have examined the role of certain assets, but have also tended to be partial analyses which only analyze certain income generating specific activities such as agricultural or rural non-agricultural

employment. The role of this paper is to treat more detailed all the assets and their result on rural incomes.

Assets and rural income generating activities: A conceptual framework

Ellis (2000) defines a livelihood as comprising the assets, the activities and the access to these that together determine the living gained by an individual or household. Household assets are defined broadly to include natural, physical, human, financial, public and social capital as well as household valuables. These assets are stocks, which may depreciate over time or be expanded through investment. The value and use of an asset depends not only on the quantity owned but the ownership status and the fungibility of the asset. For example, land that has a clear and transferable title may be sold while human capital, although clearly owned, cannot be transferred. Assets, such as literacy and numeracy of household members, can potentially be used in a number of productive activities while others, such as farm machinery, tend to be coupled with particular activities. In some cases, such coupling may be the product of specialization and can lead to higher returns to the asset. However, the lack of fungibility of coupled assets can dictate the economic path a household takes or can lead to an asset not being used to its full potential.

Based on access to a set of assets, households allocate labor to different activities to produce outcomes such as income, food security and investment spending. The allocation of labor to a particular activity may be a short-run response to make-up income deficits due to an economic shock or to obtain liquidity for investment, may be an active attempt to manage risk through diversification of activities, or may be part of a long-term strategy to improve household well-being. For these reasons, at a given point in time households may have a diverse portfolio of economic activities.

The state influences activities through a variety of past and present actions such as the investment in infrastructure, provision of services, coordination and efficiency of activities, design of interventions, implementation and enforcement of laws, regulation as well as interaction with the private sector and NGOs. Finally, civil society shapes activities because institutions determine the acceptability of and returns to activities, influence the use of assets, and establish the rules that govern the use of social capital.

While the context in which a household operates varies both across and within countries, there are a few key assets which appear to be closely linked with labor allocation decisions and thus lead households to certain economic activities across a range of contexts. Land, education and

infrastructure access appear in particular to be associated with certain economic activities. These three assets are often the focus of policies designed to promote rural development. While such policies are often intended to improve the efficiency of resource use, by design or by default, they also influence household labor allocation decisions and the pathways that households take to improve their capacity to generate income.

Land

Land ownership is expected to be closely linked to agricultural production, including both crop and livestock production. It is an asset that is not fungible across a range of activities and has a direct value only in agricultural production, although it can be used for different agricultural activities. It may have an indirect value in other economic activities, however, as collateral for credit and thus is potentially linked to these activities. In general, however, those without access to some land are expected, on average, to focus on other economic activities and limited land access is hypothesized to be linked to participation in off-farm (agricultural wage and non-agricultural income generating) activities.

The evidence generally supports these conclusions, particularly the result that land is negatively associated with non-agricultural activities. For Mexico, Yunez-Naude and Taylor (2001) find a positive relationship between land size and participation in crop and livestock activities although no relationship between crop income and land size. They do find a positive relationship for land size and livestock income. They also find a negative relationship between land size and participation in wage employment, as do Winters, Davis and Corral (2002) for Mexico. Corral and Reardon (2001) find a positive but diminishing effect of land on total farm income in Nicaragua, but also find a negative link to non-agricultural wage employment participation and income as well as farm wage income. For Egypt, Adams (2002) finds a positive relationship to agricultural and livestock income and a negative relationship to overall non-agricultural income. A number of other studies show a negative relationship between land size and non-agricultural employment participation or income for a range of countries including Chile (Berdegue et al, 2001), Ecuador (Elbers and Lanjouw, 2001), China (de Janvry, Sadoulet and Zhu, 2005; Zhu and Luo, 2005; Zhang and Li, 2001) and India (Lanjouw and Shariff, 2002).

Education

The human capital of a household, as measured by schooling, is expected to generally be linked to a shift to non-agricultural activities since this is where the returns to education are most likely to be highest (Taylor and Yunez-Naude, 2000). This does not necessarily imply there are no

returns to education from agriculture, but rather that, on average, increased education appears to be likely to lead to a shift away from agricultural activities. A lack of education creates a barrier to entry in many non-agricultural activities and education is expected to be particularly important in participation in non-agricultural activities.

Infrastructure and urban proximity

Access to infrastructure and population centers is likely to increase opportunities in non-agricultural activities. Infrastructure such as electricity is a useful input for certain self employment activities. In addition, proximity to markets provides opportunities to sell output, and purchase inputs, from self employment activities as well as opportunities for non-agricultural wage employment. Of course, access to markets may also provide higher returns to certain agricultural activities through better input supply and greater opportunities for high-value crops. On average, while it is unlikely that those with infrastructure access and within proximity to urban centers will be more likely to participate in agricultural activities, those that do participate may obtain more money from those activities.

Demographics, wealth, social capital and other factors

Beyond these key assets, a number of other variables of course are also likely to influence activity choice. Demographic characteristics, particularly the amount of labor available, could lead to an expanded range of activities, particularly in contexts in which land is limited. Other demographic factors such as the age of the household, which reflects the stage of life of the head, and the gender of the household head, which may influence available opportunities, are also expected to play a role in activity choice. The amount of investment the household has previously made in agricultural and non-agricultural assets also matters as does the level of social capital of the household. Finally, the local context including the functioning of markets, availability of common property resources and local government policy, are all likely to influence household decision-making with respect to activity choice.

CONCLUSIONS

The above discussion points to a few key hypotheses regarding the relationship between key assets and income generating activities—namely, i) land ownership is positively associated with participation in and income earned from agricultural activities and negatively associated with non-agricultural activities and agricultural wage participation; ii) education is positively associated with participation in and income earned from non-

agricultural activities and negatively associated with agricultural activities, and iii) infrastructure and proximity to urban centers is positively associated with participation in and income earned from non-agricultural activities and negatively associated with agricultural activities.

In conclusion once with development, agriculture tends to become less important to the economy as a whole and non-agricultural sectors tend to become more important (Chenery and Syrquin, 1975). This transformation of the economy is likely to provide more opportunities in the non-agricultural economy and thus greater options for those with education and access to infrastructure and urban centers.

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