

PROPERTY RIGHTS: CHALLENGES FOR FOOD SECURITY

DRAFT NOT FOR QUOTATION

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Introduction

One often hears the now fashionable term "food security" in international development fora. World food supplies have increased dramatically over the last three decades as new crop varieties have generated increases in per capita food supplies. Steadily declining real food prices have made more food available to a greater number of people.

Despite these optimistic scenarios, world hunger still presents a grim picture. The benefits of world agricultural progress have not been evenly distributed and today - largely in South Asia and sub-Saharan Africa - 800 million people remain impoverished and undernourished. Thirteen million people die every year from hunger and related causes. Indeed, per capita food production has declined in 75 of the poorest countries of the world since 1960. Thus, it is not just a question of producing more food, but of ensuring that the poor have access to food, either through their ability to produce it or purchase it - in other words, ensuring a level of food security.

The underlying causes of food insecurity are many, including poor infrastructure, bad policies, political instability. This paper examines one factor linked to food security -- property rights, broadly conceived as the bundle of rights, duties and institutions associated with land, water or other resources. In developing the framework, this paper first presents a definition to the meaning of food security and then examines ways property regimes affect food security. It concludes with a discussion

about specific issues facing common property regimes. The relationship between property rights and food security is of more than purely academic interest. Development planners and policy makers concerned with alleviating food insecurity and food crises need to address the underlying root causes of food shortfalls. And property rights are one very central, though complex and still poorly understood, variable.

II. Food Security

The term "food security" can have various meanings. Some tend to think of it as synonymous with hunger eradication. Others see it as synonymous with production increases. And to those more oriented to economic questions, it is associated with effective food markets.

The United States Agency for International Development (USAID), drawing on the 1990 legislative reforms to the United States food assistance Public Law 480, issued its own definition of food security: "When all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life." The definition includes three components: food availability; food access; and food utilization.

The World Bank has also adopted a similar definition (Van Haeften 1995). The critical point is that food security is not just a question of food production at the supply end, but also a question of purchasing power at the demand end.

Food aid plays an important role in alleviating food

insecurity, particularly short-term and crisis-driven food insecurity, but meets only a fraction of the needs of the poor. It is increasingly recognized as a temporary solution which does not address the underlying causes of food insecurity. Indeed, experience has shown that food aid is most effective and results in long-term pay-off when used in conjunction with complementary development programs. Improved access to food through increased agricultural productivity, better resource management and increased incomes is essential to meet the food needs of the world's growing population.

In an effort to bridge the gap between food aid and longer term development assistance (in the parlance, "relief to development continuum"), some have introduced the notion of "livelihood security." For example, in CARE's work in the Greater Horn of Africa, they emphasize that food security cannot be achieved unless livelihoods are made sustainable. They define this as "adequate and sustainable access to income and resources to meet basic needs (including adequate access to food, potable water, health facilities, educational opportunities, housing and time for community participation and social integration)" (Bart et al 1995).

This more inclusive focus on livelihood security puts property rights squarely in the center of the picture. As Molina (1994) notes, the availability of food depends on a variety of things - food production, labor, capital, knowledge and technology, social/production relations; food prices, food supply

in the market, cash flow from rents, wages, profits and transfers from the government. Both short and long term food insecurity result from chronic poverty, low agricultural productivity, high rates of population growth, civil conflict, poor infrastructure, inappropriate economic policies, limited arable land, etc. But perhaps most important, property rights are critical - and property rights can ensure both the means of producing food but also the means of access to other resources and social and political power.

Property Rights and Food Security

The following presents an overview of the the key issues linking property rights and food security. Our understanding of the linkages has largely focused on: (2) the linkages between the agrarian structure of property rights and the distribution of resources; and (1) the linkages between property rights and agricultural productivity. This paper discusses these two areas and presents some additional ones planners and policy makers should address in efforts to promote food security.

(1) Property Rights and the Distribution of Resources

Underlying much of the western development literature is a notion that private rights to resources, allocated through market mechanisms, offer more stability and greater food security than common property regimes. Hardin's famous argument about the "tragedy of the commons" focused on the misconstrued notion that common property systems are subject to abuse because of lack of ownership. Ensuing arguments have shown that Hardin's commons

failed to distinguish between "common property management and "open-access" systems. However, Hardin has left an enduring sense among western development agents and host country governments that private property regimes provide greater food security.

On the other hand, there is concern that reliance on the private sector to distribute land and other resources through market mechanisms can lead to gross disparities in wealth, and hence food access. Research has focused on land reform efforts - both land tenure reforms (changing the nature of the rights and duties underlying land) and land reforms (redistributing holdings). It is concerned with issues such as the concentration of land in the hands of the wealthy, while poorer farmers are pushed onto marginal areas; or differences in farm size, which affect land use, cropping systems and ultimately, incomes.

Notions about the effectiveness of private property have been the motivating force behind US assistance in land reforms in Eastern Europe and the former Soviet Union. Donor assistance has focused on promoting active land markets for private ownership in land. Albania provides perhaps one of the most striking examples of a massive shift from state and collective ownership to private land ownership but major reforms are taking place throughout the region. Interestingly, however, many of the former collectives have been reforming as people realize the benefits of collective farming (see for example, Lerman et al 1994). Examples of this are found in Hungary, Russia and Bulgaria. We are, indeed, not

witnessing the flourishing of private property as we know it in the west but rather a different kind of common property regime that ensures a modicum of food security in an unstable and insecure period in the region's history.

(2) Property Rights and Agricultural Productivity

Perhaps the most obvious, and most complex, link between property regimes and food security focuses agricultural productivity. Property rights provide access to the resource base that enables the production of food, and hence its consumption. They directly affect food access at the household level by governing resource access, and indirectly affect food security at the regional or national level through overall food availability and hence, food prices.

(a) Tenure Security and Productivity. The main avenue of research linked to food security has been focused on land registration and tenure security - that is peoples' perceptions of their longer term rights to land and their willingness to invest in the land. These investments, in turn, affect crop yields and farm income for food purchases. The logic is that tenure security provides better incentives to invest in agricultural productivity - mulching, terracing and fertilizing land (Roth, Weibe and Lawry 1993)

In Africa, tenure security under customary, that is, collective ownership has been poorly understood and viewed as a constraint to agricultural productivity (Atwood 1990). In the 1980s donors and host country governments promoted large scale

titling and registration programs as an antidote. Some recent research has shown that the customary tenure systems can confer enough tenure security for investment and hence, improved productivity and that the costs of large scale titling and registration programs may outweigh the benefits.

Despite the findings, governments still are promoting formal registration of individual holdings as a means of increasing productivity in agriculture. For example, the Government of Zambia has recently embarked on a massive land privatization and registration program, with encouragement from the World Bank. Yet, the impacts of a shift from customary landownership in which land is held in common by the community to private ownership are not known.

There appears to be strong evidence of a negative correlation - reductions in tenure security lead to loss of food security. Interestingly, the positive correlation between improved security and investment are less clear. Migot-Adholla and Bruce's recent volume, "Searching for Tenure Security in Africa" is perhaps the most comprehensive work on this topic but the results remain not altogether conclusive. Indeed, there are numerous examples where tenure security is not the determining factor at all in investment decisions. For example, in Haiti, recent research has shown that tenure security has no effect on tree planting decisions. Secure property rights are clearly not alone in promoting food security.

Many questions remain about the positive linkages between

tenure security, productivity and food security. Maxwell (1995) has begun asking a number of questions for empirical research:

- What are the bases of food access (income, market access, direct production, food transfers and food stocks) at the level of the household?
- What are the livelihood strategies that link the productive resource base to food access and food consumption within the household?
- In a multi-person household, how are access rights to land distributed?
- Is the resource base managed in such a way that long-term productivity is maintained?

Perhaps the key overarching question for donors is: "when, under what conditions do common property regimes yield greater benefits in terms of food security and when does formal registration of individual property make more sense?" Some initial work suggests that individualization of land ownership through titling programs seems to make more sense when infrastructure such as irrigation schemes and roads are introduced (Bruce and Migot Adollah 1994). But the case of Eastern Europe and the former Soviet Union provides a new twist on questions about the effects of collective and privately held land on food security.

(b) Access to Land and Investment

In thinking about property regimes and food security, one tends to see the causal arrows going from the former to the latter - e.g., how does the access to property affect food access, availability and utilization. Michael Carter (personal communication) has suggested that the arrows be reversed, asking

- how does food security affect access to property? In other words, do the poor and more food insecure tend not to invest in productive assets such as land? Do they try to minimize risk of hunger by putting food stocks into reserves, rather than selling food stocks and investing in land? Is there a cycle of poverty at work among the most food insecure populations which land markets only exacerbate? Do land markets need to be oriented to help the poor get out of poverty and make investments?

(3) Access to Resources, Conflict and Food Security

Most of the research on property rights and productivity assumes a reasonably stable political environment. However, many of the most severely food insecure regions are also those areas where ethnic conflict is occurring. And the conflicts are often conflicts over property rights - who has access to resources. For example, in Rwanda and Burundi, although there are numerous explanations for the ethnic violence, there are those who contend it is intimately linked to control over resources. Both countries are densely populated with severe resource allocation problems. The ethnic groups have cultural differences, as well as different land use patterns and priorities for land use (Bruce 1995).

In situations of competition and conflict over access to resources, it is usually those with private rights to land who displace those with commonly held rights. For example, in Somalia, much of the anger which led to the collapse of national coherence was anger over unfairness in resource distribution,

with pastoralists marginalized and the valuable urban and irrigated land moving into the hands of clans associated with the government.

The United States and other donor countries contribute extensively to food aid in situations like Rwanda and other countries of the Greater Horn of Africa but are seeking ways to move beyond food aid to development assistance. Are there ways to address land access problems in order to prevent conflict and resulting food insecurity? Are land access problems one early warning mechanism for food security problems?

John Bruce at the Land Tenure Center has begun thinking about this issue for the Greater Horn of Africa Region, a region with a high degree of food insecurity and conflict. He has posed a number of questions that link land access, conflict and food security:

-- What is the relationship between ethnicity and conflict over resources? Have threats to food security been distributed unequally ethnically, and to what extent has this fuelled the outbreaks of violence. Have ethnicity-blind land policies supported by the donor community sometimes allowed dominant ethnic groups, utilizing the rhetoric of development, to strip weaker groups of resources?

(4) Property Rights, Local Control of Resources and Food Security

In recent years there has been an increasing interest in the relationship between property rights, local control of resources

and incentives to. The World Resources Institute (Lynch 1991) has advocated focusing on community based rights to land by indigenous communities as both a human rights issue and an issue for sustainable resource management, though they have not taken the argument a step further towards addressing food security problems. Others have made the case that community forests provide important sources of food and income to ensure household food security (Falconer and Arnold 1991, Chambers and Leach 1989).

Although there is a good deal of interest in understanding how local management of property regimes promote conservation of the resource base, little is still known about the implications for food security. Lawry (1989) presents a rather dismal picture of the ability of local groups to manage common property in the face of modernization and technological change. Others, such as World Resources Institute, are more optimistic. Do community based land rights result in improved local level access to food supplies? With community based rights, are local people guaranteed greater long-term security of forest food supplies?

(5) Property Regimes as Means of Minimizing Risk of Famine and Food Shortage

A number of empirical case studies by anthropologists and other social scientists point to the ways in which property regimes serve to reduce the risk of short and longer-term food shortfalls (see for example, Netting 1993, Geertz 1963, Wolf 1955). Geertz's notion of "shared" poverty highlights the idea

of risk management through the granting of communally held village rice lands to needy or landless farm families. Netting has described the collective use of highland pastures in Torbel, Switzerland and the rules imposed to ensure that all could benefit (1993:172-178).

Studies of irrigation management in Sri Lanka demonstrate how the local practice of "bethma" - that is, sharing of land during periods of water stress - ensure that all farmers in the community are guaranteed some agricultural yield. Although plots are considered individually owned, a form of collective sharing takes place during seasonal shortages.

Jodha (1992) has perhaps made the most pointed argument about the role of common property regimes in ensuring food security for poor households. He argues, using data from India, that the relatively poorer households depend more on common property resources for fuelwood, fodder and food. This notion is echoed in studies by Chambers and Leach (1989) on the role of trees as savings banks for poor people.

Development assistance programs designed to increase productivity through agrarian reforms - such as privatization of holdings, land consolidation, etc - have, in a number of cases, eliminated the institutions that provide insurance against famine. For example, Shipton (1993) shows how in the Sahel, imposition of tenure regulations over customary ones has led to increasing risk of hunger and famine. Maxwell (1995) cites cases where reforms aimed at reducing the fragmentation of land

holdings have conflicted with risk-reduction strategies in drought-prone production systems. In any given context it will be important to ask: Will a change in property regime negatively affect people's risk insurance against periodic and seasonal shortfalls?

Conclusions:

This paper has raised more questions than it has answered. But, if those of us who are working on issues of property are going to influence the development agenda, we need to be asking and then answering these questions.

We also need to begin addressing some of the larger questions such as: Where geographically are property rights a food security constraint? How do we assess whether property rights are a key cause of food insecurity in any given situation? How do we measure the success of property rights interventions in improving food security?

These are not easy ones to unravel but we have an opportunity to use our understanding of property regimes, particularly common property regimes, to inform policy makers and donors about food security and food aid issues. The lessons from common property systems suggest that common property institutions can help minimize risk of food insecurity. Property regimes are not the only solution to food insecurity but are clearly, a key element.

The experience in Eastern Europe and the former Soviet Union offers some particularly interesting lessons. The expected

transition from collective to private property has not taken place as farmers have tried to minimize risk and ensure certain income levels. The reasons may be both economic and cultural but the experience does suggest that food security needs can drive property arrangements in certain directions. Further analysis of the transition in the region may lead to greater insights into the role of common property in enhancing food insecurity.

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