

ECN 230. Required Reading 3. Maxwell and Fernando

"Cash Crops in Developing Countries: The Issues, the Facts, the Policies", *World Development*, vol 17, 1989; S. Maxwell and A. Fernando

Summary. – The issue of “cash crops” is profoundly controversial. The debate uses different definitions of the term and slides across levels of analysis from the household to the international economy. It also cuts across arguments, crops, countries and time periods. This paper sets out to order the debate. It deals first with definitions and taxonomy and then reviews issues connected with cash crops and (a) growth, (b) distributions, (c) food security, (d) dependency and (e) the environment. The paper concludes that with appropriate policies cash crops can offer a route to equitable growth.

1. INTRODUCTION

The issue of “cash crops” is profoundly controversial. On the one hand, cash crops are favored for their potential contribution to growth, employment and external balance. The expansion of cash cropping is recommended to exploit comparative advantage and provide the basis for industrial development through intersectoral linkages (e.g., World Bank, 1981a, b). On the other hand, cash crops are opposed by those who deny these benefits and point to additional drawbacks, especially in the spheres of distribution, dependency and food security. This contrary view is particularly associated with the sustained critique of the “food-first” tendency: it can be summarized in eight propositions, listed in Appendix I (see also George, 1976; Lappé and Collins, 1977, 1986; Twose, 1984).

The debate ranges far and wide. It uses different definitions of the term “cash crop” and slides across levels of analysis from the household to the international economy. It also cuts across arguments, crops, countries and time periods. Our main purpose here is to try and bring order to the debate. We attempt (a) to clarify the definitions; (b) to identify the issues; and (c) to assess the evidence. We conclude with a general statement on cash crop policy and a review of research priorities.

Our approach is pragmatic. We are concerned with the costs and benefits of an outward looking cash crop strategy or one which begins with food self-sufficiency. Further, we are concerned to assess the advantages and disadvantages of different kinds of cash crop, grown at different levels of output, under different production conditions. In the last analysis, as we shall see, our focus is on cash crop policy: not just “whether,” but “what” and “how much” and “where” and “how.” To answer these questions, we need to touch on a large number of broader development debates, including not only those about outward orientation and food self-sufficiency, but also those to do with technical change, rural transformation and intersectoral relations.

At the risk of being thought a theoretical and reductionist, we have chosen to abstract from the wider debates and focus on the particular issues of relevance to cash crops: this seems to us more systematic than trying to juxtapose competing theories, which often address different issues at different levels of analysis. We turn explicitly at the end of the paper to the question of “adding-up” and to an overall framework for cash crop policy.

The organization of the paper is accordingly as follows: Section 2 deals with definitions and taxonomy; Section 3-7 cover the main areas of debate, grouped under five headings – growth, distribution, food security, dependency and the environment; Section 8 deals with the problem of

“adding-up”; and Section 9 summarizes the conclusions and suggests a research agenda.

The conclusion of the paper is that both extreme positions on cash crops are flawed. The case against cash cropping has been greatly overstated by the “food-first” lobby; cash crops can offer a route to equitable growth, both for households and for countries. However, the pursuit of short-term comparative advantage can have negative consequences for distribution, nutrition and the environment: the uncritical proponents of cash crops have overlooked these dangers. Appropriate policy is necessary to secure satisfactory outcomes and should on careful assessment of long-term comparative advantage as well as consistency between cash crop policy, food policy and rural development policy. Scale and capital intensity are key issues: much of the criticism of cash crops turns out to be criticism of large-scale, capital-intensive agriculture rather than criticism of the output mix. For the future, changing technology and market conditions are likely to produce significant shifts in the location and size of cash crop enterprises: more work is needed on the implications of these changes for individual cash crop producers. This is one item in a research agenda which also includes more work on the differences between different cash crops and more attention to the overall balance sheet of national experience in the cash crop sector.

2. DEFINITIONS AND TAXONOMY

The first problem in dealing with “cash crops” is that the term is used in different ways. The literature supplies at least four different definitions, to cover (in approximately decreasing order of generality): (i) all marketed surplus; (ii) nonstaple agriculture; (iii) nonfood agriculture; and (iv) export agriculture. In all cases, the term “crop” includes both livestock and forest products.

A common-sense definition of “cash crop” would be a crop that is sold for cash. At the household level, this would refer to all marketed surplus [definition (i)]; at the national level, to crops sold abroad [definition (iv)]. In either case, the crop might be grown specifically for sale or might be sold because production was surplus to “domestic” demand. These common-sense definitions are used in part of the literature (e.g., von Braun and Kennedy, 1986), but the critics of cash crops have often been concerned more specifically with exotic commodities like pineapples (George, 1976; Lappé and Collins, 1977, 1986) or lettuce (Mackintosh, 1977). There is also special concern with nonstaple agriculture, particularly beverages and sugar (Dinham, 1983; Coote, 1987, 1988). In the end, none of these definitions is intrinsically right or wrong. However, it is important to specify which definition is being used and to be consistent. In general, in this paper, we shall use the common-sense definitions, referring to export agriculture at the national level and marketed surplus at the household level.

Whatever definition is used, two questions arise. First, how important are cash crops in developing countries? Second, is it possible to characterize economies (regions, households) to reflect the relative importance of cash crops? These questions raise both conceptual and empirical problems and are discussed in more detail in Appendix 2. In principle, “importance” can be defined in terms of land use, employment, output, income or “export” at the household, village, regional or national levels. In practice, data are extremely hard to obtain. Internationally comparable data sets are only available at the national level, which means

that most analysis is concerned with export agriculture. Furthermore, since the analysis is mostly based on national accounts statistics, there is little information available on the share of cash crops, even defined as agricultural exports, in land use or employment. Better data on cash crops are clearly a priority.

Data are brought together in Appendix 2 on the importance of export agriculture *vis-à-vis* total agricultural output, total merchandise exports and GDP. The results are not surprising. They show that export agriculture is important for most countries and very important for many. In 1979, over one-third of developing countries exported more than 20% of all agricultural output by value (World Bank, 1984, p. 77): for a similar proportion agriculture accounted for more than 60% of merchandise exports (World Bank, 1986, p. 4). Perhaps the most telling statistic is the share of agricultural exports in GDP. In 1979, the mean for all developing countries was 9.5%. Forty-one percent of low- and lower-middle-income countries derived more than 10% of GDP from agricultural exports.

Cash crop oriented economies show, of course, a much higher dependency than these figures would suggest. Sri Lanka devotes 56% of total crop land to nonstaple agriculture, derives 74% of export earnings from agricultural exports and relies on export agriculture for 23% of GDP. Tea and rubber together account for approximately half of total agricultural export earnings. Honduras shows a similar pattern: 85% of exports are agricultural and agricultural exports account for 33% of GDP. An African case is Malawi, where the figures are, respectively, 96% and 18%. It is clear that these countries need to be treated in a different way from, say, India, where agricultural exports play a very small part (2%) in GDP.

Other typologies are needed to translate these distinctions to the subnational level and to take account of the relative importance of cash crops in land use and employment. More work on classification is essential in order to locate individual case studies in a general framework.

3. CASH CROPS AND GROWTH

The contribution of cash crops to growth of output and income is a key area of debate. The case for saying that cash cropping can contribute to growth can be summarized in three propositions:

- (i) Cash cropping allows improved factor utilization in both the short and long term. In the short term, it provides both a "vent for surplus" and a means of increasing income through the exploitation of comparative advantage. In the long term, these benefits can be reinforced by indirect effects, including specialization, economies of scale, "educative" effects and greater x-efficiency associated with higher levels of exchange (Mill, 1848; Gillis *et al.*, 1983; Myint, 1984).
- (ii) The exploitation of comparative advantage in the short run maximizes the investible surplus, which meets a necessary condition for maximum long-run growth (Gillis *et al.*, 1983, p. 414). In the international context, cash cropping may also attract foreign factors of production (capital, skill, labor) to speed the growth process (Myint, 1984; Gillis *et al.*, 1983).
- (iii) Cash cropping contributes to growth through linkage effects, both production (upstream and downstream) and consumption. Production linkages may permit diversification away from

the "staple" (Watkins, 1963; Baldwin, 1966; Hirschman, 1977; Hubbard, 1986); similarly consumption linkages may encourage diversification, particularly into the nontradable service sector (Mellor, 1976; Bell and Hazell, 1980).

The case against linking cash crops to growth denies these propositions and argues specifically:

- (i) That the existence of a surplus waiting to be "vented" was always a myth; that the availability of surplus land or labor does not satisfactorily explain growth in the cash crops sector; and/or that in any case, whatever surpluses did exist have now been employed (Ingham, 1981; Eicher and Baker, 1982, pp. 31-33).
- (ii) That comparative advantage is not innate, but rather the historical product of past investment patterns, particularly in infrastructure and research (von Braun and Kennedy, 1986; Lappé and Collins, 1977), and also the product of current incentives and wage rates (Lappé and Collins, 1986).
- (iii) That movement along the production possibility frontier to exploit comparative advantage is not smooth and entails substantial costs which may outweigh the benefits (Alibaruho, 1981).
- (iv) That cash crop markets (for both households and countries) are unstable (Thirwall and Bergevin, 1985), again reducing potential benefits, possibly to uneconomic levels.
- (v) That any short-term benefits due to comparative advantage are dissipated in the long run by declining terms of trade, caused by low income and price elasticity of demand, technical change and surplus labor in developing countries (Prebisch, 1950; Singer, 1950, 1984; Lewis, 1969).
- (vi) That surpluses from cash cropping do not in practice contribute to investment, but are more often "extracted," by governments (for public consumption) or by foreign companies (as profit) (Lappé and Collins, 1977, 1986; World Bank 1986); or transferred from periphery to center through "unequal exchange" (Baran and Sweezy, 1966; Emmanuel, 1972; Amin, 1976).
- (vii) That, in any case, growth is not maximized by investment in cash crops when other sectors generate higher surpluses or have stronger linkages (Hirschmann, 1958; Yotopoulos and Nugent, 1976).

(a) *Outward-looking development*

In clarifying these questions, a starting point is a general literature on *outward-looking development* and its supposed benefits in terms of growth. Myint began his 1979 analysis of the relationship between exports and economic development by stating that "countries that expanded their exports have also tended to enjoy rapid economic development, and significant correlations have been found between the growth of exports and the growth of national income among the underdeveloped countries, by cross-section studies; by time series studies; or by a combination of both methods" (Myint, 1984, p. 222). Myint went on to argue that the direction of causality was from exports to growth rather than the other way around (1984, p. 238). This conclusion has a considerable pedigree (Maizels, 1968; Kravis, 1970; Chenery, 1971;

Michaely, 1977; Bhagwati, 1978; Balassa, 1978). The World Bank concluded in 1981 that “as a group, the successful countries have been those which have resisted or overcome the temptation to adopt inward-looking trade policies and to delay transition to greater export orientation” (World Bank, 1981a, p. 25). Nevertheless, the conclusion is more controversial than these quotations would suggest. Some have argued that the association between export orientation and growth is not as clear cut as had earlier been suggested (Taylor, 1986); others have argued that trade is not the “engine” of growth, rather its “handmaiden” (Kravis, 1970; Lewis, 1980; Riedel, 1983; Evans, 1987). Taylor, for example, notes that “fast-growing countries are more or less open (and) have diverse patterns of specialization” (Taylor, 1986, p. 31). The point may then be that cash cropping offers one route to growth. In the words of Reynolds, “this may be viewed as gradual, unexciting growth path; but one can scarcely deny that it is a viable path” (Reynolds, 1975, p. 20). It then becomes pertinent to ask what mechanism can turn cash cropping into growth at the household and national levels.

(b) Vent for surplus

“Vent for surplus” is the first of these mechanisms, the idea, proposed by Myint (1958), that increases in output can be stimulated by the emergence of effective demand. While acknowledging the power of this concept, a number of reviews have concluded that effective demand on its own was rarely a sufficient condition for growth, although it may have played a part along with the development of infrastructure, research, local institutions and indigenous entrepreneurial spirit (Eicher and Baker, 1982; Gillis *et al.*, 1983). In a recent test of the vent for surplus theory among cocoa producers in Ghana, for example, Ingham concluded that “there was an important element of differential behavior, and a time dimension to the cocoa supply response, which is not accounted for by neoclassical trade theory in either its vent for surplus or comparative advantage versions” (Ingham, 1981, p. 32). Similar conclusions were reached by Hubbard in his account of the development of the world beef trade: here an important role was delayed by vertically integrated and oligopolistic ... trading companies (Hubbard, 1986, 1988). In any case, the question is whether surplus land and labor still exist. In their review of agricultural development in Africa, Eicher and Baker conclude that the answer is no: “the frontier is exhausted and investments in irrigation, land reclamation and tsetse fly control are needed to intensify agriculture ...” (1982, p. 33).

(c) Comparative advantage

A second possible mechanism is the exploitation of *short-term comparative advantage*, although this issue too is hotly debated. It is important to be clear precisely what the argument is about. First, there is the question of whether households or countries do or could increase income in the short term and with given price, technology and institutional arrangements, by specializing in the direction indicated by perceived “comparative advantage.” Second, there is the question of whether those signals are “right,” given real social opportunity costs. Third, there is the question of whether the right signals are the product of past investment or current policy decisions.

To begin with the first question, there is good evidence that, in pure income terms, specialization benefits both households and nations, given existing price and other signals. For households, the introduction of a “cash” crop has been shown to increase income, both gross and net and allowing for the value of subsistence production – at least in the short run. Thus, Sharpley (1988) shows that in Kenya cash crops like coffee or tea have a value per hectare up to 10 times that of the basic staple, maize: vegetables and tobacco have a value of up to six times that of maize. Even maize itself can be a cash crop, though Eicher and Baker (1982, p. 109) quote Ruthernber (1980) as concluding that perennial crops (mostly for sale) in general offer higher and more stable returns to both land and labor than annual crops (whether for sale or domestic consumption). At the national level, similar considerations apply. An example can be found in Senegal, in a debate about the desirability of exporting groundnuts and importing food. Recent analysis has concluded that the country enjoys a continued comparative advantage in groundnut production (see ABT Associates, 1985). Specialization does offer real income gains in the short term.

Of course, preferred output mixes are determined by cost and price conditions facing producers. An argument against cash crops has been that market distortions encourage farmers, regions or countries to grow output mixes that are suboptimal from a social point of view. The existence of such distortions has been a theme of recent policy analysis (see, e.g., World Bank, 1986) and it has been alleged that food crops have been penalized relative to potential export agriculture (Bates, 1984; Twose, 1984; Lappé and Collins, 1986, p. 88); on the other hand, export crops have nearly always suffered price discrimination whereas some countries have protected food prices to help achieve self-sufficiency (Binswanger and Scandizzo, 1983; World Bank, 1986, pp. 63-66). In any case, as Von Braun and Kennedy have argued (1986), the two can be complementary rather than competitive. There is no reason to believe that cash cropping would not survive the correction of distortions.

Critics of cash crops argue further that past investments in the cash crop sector have “fixed” economies in a certain mold. They cannot diversify out of traditional specializations even when these are no longer profitable, because physical infrastructure and social institutions are inflexible. This argument is a theme of “staple theory” (Watkins, 1963): in the words of Hubbard “a ‘staple trap’ awaits the economy which is unable to develop a capacity to transform” (1986, p. 5). A staple trap is most likely to occur where linkages are low and where “export production is superimposed on a pre-existing subsistence economy” (Watkins, 1963, p. 149). However, the trap can be avoided by deliberately creating linkages and by using the surpluses generated by the staple to foster diversified growth: in these circumstances, cash cropping can provide the basis for “economic transformation” (Spooner, 1988; Kennedy and Cogill, 1987, p. 55). There is interesting potential here for crop-specific analysis. For example, it may be that some crops have much greater linkages than others. Similarly, the costs of moving along the production possibility frontier will be much greater for crops where long-term

investment has been made in either production (coffee trees) or processing (tea or sugar factories).

(d) Instability

Whatever the short-term comparative advantage, *instability* may reduce the benefits of specialization substantially, at both the national and the household level. In both cases, instability exposes the producer to risk. There is evidence at the national level that short-term instability in real and nominal commodity prices and earnings is increasing (Helleiner, 1986, p. 6). Thirwall and Bergevin found that between 1960 and 1982 the duration of price slumps for primary commodities was greater than for manufactures, while for booms it was shorter (1985, pp. 812-813). The effect of price instability on growth is an area of contention, although common sense would suggest a negative correlation (for a contrary view see, however, Knudson and Parnes, 1975; Yotopoulos and Nugent, 1976; Nankani, 1980; Adams and Berman, 1982). At the household level instability may be associated with production risk or market risk. Thus Sen (1981, p. 126) notes that "compared with the farmer or the pastoralist who lives on what he grows and is thus vulnerable only to variations of his own output ... the grower of cash crops, or the pastoralist heavily dependent on selling animal products, is vulnerable both to output fluctuations and to shifts in marketability of commodities and exchange rates." However, there may be an off-setting mechanism at work. Cash cropping obviously entails a market risk, but selling a proportion of output may help to offset the production variability of subsistence crops. In a study in North Kordofan, Sudan, Reeves (1984) argued that small farmers diversified risk by producing a wide range of cash and subsistence crops, with the cash crops acting as a hedge against the failure of food production "which is generally riskier due to climatic and crop specific characteristics" (1984, p. 102). For Bangladesh, Shahabuddin (1982) argues that small farmers try to avoid "marketplace risk" by devoting a large share of their acreage to subsistence crops. However, for farmers whose incomes from farming activities are insufficient to meet subsistence needs, it is rational to devote a relatively larger acreage to cash crops, despite greater price variance, because the greater returns from cash crops maximize chances to survival (pp. 95 and 100; see also Shahabuddin and Messtemen, 1986).

(e) Terms of trade

In the longer run, one of the strongest arguments against cash crops has been associated with the alleged *secular decline in the terms of trade*. This argument applies at the national level and is used to suggest that resources should be transferred out of agriculture, into manufacturing (Prebisch, 1950; Singer, 1950, 1984; Lewis, 1969). The debate has generated a large theoretical literature, concerned with the most appropriate measure of the terms of trade; as well as a large empirical literature attempting to measure the direction of change. A measure of the terms of trade is required which takes account on movements not only in prices (net barter terms of trade), but also in productivity and employment. Spraos (1983) calculates "employment corrected double factorial terms of trade" to give an accurate picture of changing comparative advantage and concludes that the terms of trade of developing country agricultural exports are indeed declining on a secular trend: he finds an annual

decline of between 2% and 3.5%, using slightly different definitions and time periods. Over-aggregation is a danger, however, and some commodities have performed much worse than others: cotton, jute and rubber, for example, have performed much worse than beef, tobacco or the major beverages. (For further discussion of the terms-of-trade issue see Spraos, 1980; Balassa, 1984; Singer, 1984; Lele, 1985; Thirwall and Bergevin, 1985; Evans, 1987.)

Whatever the outcome of the terms-of-trade debate, it misrepresents in one way the choice to be made by developing countries. For practical purposes, the choice is not only between agriculture and industry (as portrayed in the terms-of-trade debate and in much of the standard literature on agricultural economies (see, e.g., Watson, 1977, pp. 323-327)). It is also a question about the output mix in agriculture and here the question is back to being one of comparative advantage and the "domestic resource cost" of producing alternative commodities (Schudakowsky, 1984; Byerlee, 1983). This decision depends not on the relative cost and price movements of agricultural products compared to manufactures, but on the relative cost and price movements of agricultural exports compared to agricultural imports. A preliminary analysis of this question, based on the net barter terms of trade for tropical agricultural exports against the main traded food import, wheat, is presented in Appendix 3. The results are highly suggestive. They show that for the major commodity groups, only in the case of textile fibres has there been a significant deterioration since 1954 of the net barter terms of trade against wheat. Prices of other main commodity groups may have fallen in real terms, but they have fallen less fast than wheat. Other things (notably input costs) being equal, this suggests that developing countries may have an increasing rather than a decreasing comparative advantage in producing export crops.

There are, however, two important qualifications to this optimistic conclusion. In the first place, there is no guarantee that the advantage of tropical agricultural exports will continue. Much depends on the price of internationally traded foodgrains continuing an historic fall in real terms, and this in turn depends both on continued technical change and continued intervention by governments to guarantee domestic producer prices well above world market levels. Protection is found in some poor countries as well as most rich ones (see World Bank, 1986; and for a review of Asian experience, *Far Eastern Economic Review*, September 1986): it has the effect of reducing the demand for imports and increasing the supply of exports by the countries concerned, making foodgrains easier and cheaper to obtain for those which continue to import. It is an open question whether protection will continue at present levels: if it does not, food prices may stabilize.

The second qualification is that it is misleading to generalize for all countries. Quite apart from the different commodity mix to which countries are committed – and which, therefore, determines the degree of risk and the overall balance of terms-of-trade movements – there are differences in cost structures and institutional capacity. As early as 1970, Kravis showed that export performance depended not only on the growth of world markets but also – and to a considerably greater extent – on competitiveness and

diversification (Kravis, 1970). This is likely to accelerate with rapidly changing technology in agriculture and rapidly integrating markets.

(f) Surpluses

The third main area of debate has to do with the use of *surpluses* derived from cash crops. Are they invested for growth or are they diverted to foreigners or “wasted” on luxury consumption? Obviously, experience varies from case to case. The important questions are:

- (i) What is the total size of the surpluses obtained?
- (ii) What is the distribution of surpluses between foreigners and nationals, the private sector and the public sector, savings and consumption?
- (iii) What is the efficiency of the share used in investment?
- (iv) What are the consumption linkages associated with that share of consumption expenditure spent on domestically produced goods and services.

These issues have not been studied systematically in a cash crop context, although anecdotal evidence is to be found in the food-first literature, suggesting that surpluses do not benefit the poor (e.g., Lappé and Collins, 1986, pp. 88-90). At the national level, work by Ellis on Tanzania (1983a) shows that a large share of potential surpluses was diverted to marketing boards, where it was used essentially to pay inflated civil service costs. This is also the thrust of the criticism of marketing boards and government intervention in agricultural pricing more generally found in the work of Robert Bates and in recent writings from the World Bank (Bates, 1984; World Bank, 1986). However, other studies show how surpluses obtained in boom years can successfully be used to further growth (Daniel, 1986; Harvey, 1986). At the household level, similar arguments apply. The arguments on gender (see below) tend to suggest that cash crop surpluses are often dissipated in male consumption.

The issue is approached from a different perspective in dependency theory. On the one hand, the “development of underdevelopment” school argues that surplus is transferred primarily through “unequal exchange” in trade (for review of the dependency literature see Palma, 1978; Roxborough, 1979; Seers, 1981; Blomström and Hettne, 1984; Rao, 1986); on the other hand, others give pride of place to exploitation in the realm of production rather than circulation (Laclau, 1971; Kay, 1975; Brenner, 1977; Warren, 1980; de Janvry, 1983). De Janvry attempts an eclectic approach (de Janvry, 1983). In this model, surplus is extracted from the periphery in a combination of profit repatriation, royalties, capital flight, debt interest and unfavorable terms of trade. To the extent that growth takes place at all, it is said to take place primarily at the center through market expansion.

(g) Linkages

Finally, there is the question of *linkages*. The conventional wisdom is that although production linkages from agriculture may be substantial, they are not generally as large as production linkages from manufacturing (Hirschman, 1958). Yotopoulos and Nugent ranked agriculture 15th out of 18 sectors in terms of the total production linkages obtained (Yotopoulos and Nugent, 1976, p. 303). However, production linkages will be larger from some crops, especially where they are industrial raw

materials, where substantial processing is required or where input costs are high. Mathews (1988) has reviewed evidence for “food crops” and “export crops” and finds conflicting evidence, with results from Tanzania (Odegaard, 1985) showing that export crops have the greater linkages; but results from Kerala, where export crops are found largely on plantations, showing the reverse (Devi, 1986). Mathews concludes that more detailed studies are needed, perhaps using more fully specified macro-models of developing countries (Mathews, 1988). Studies which are able to control for the mode of production will be particularly helpful in formulating conclusions about the linkage intensity of different crops.

Production linkage analysis ignores consumption linkages (Bell and Hazell, 1980; Hazell and Roell, 1983; Harriss, 1987). The relative size of consumption linkages associated with different sectors or crops has not been studied explicitly but there may be a case for arguing that consumption linkages in rural areas (where consumption has relatively low import content) will be higher than linkages obtained in urban areas. This may offset the bias against agriculture as compared to urban-based manufacturing. Since surpluses from cash crops accrue to different classes according to mode of production and factor intensity, there would seem to be a need for disaggregated studies of ways to maximize linkage effects (cf. Schluter, 1984).

To conclude this section, it is obvious that there is a great dearth of country case studies which look at each of the arguments in a general framework. It is also difficult to generalize about crops independently of the mode of production or the policy context. However, the literature does provide theoretical and empirical support for the view that cash cropping can be a route to growth for both households and nations. Growth will be greater when a household or country is able to sustain genuine long-term comparative advantage in a crop: when the crop has strong linkages to the rest of the economy; when consumption linkages are high; and when surpluses are used constructively both to hedge against uncertainty and foster growth. Some of these conditions are crop specific or depend on conditions in the international economy. Others, however, are amendable to government policy on research; pricing, taxation or infrastructure (Maxwell, 1998, pp. 3-4). Since experience varies between crops and countries, there will be high returns to comparative case studies which both describe and account for the long-term growth experience of cash crop economies at the household and national level.