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**POVERTY AND LIVELIHOOD ENTITLEMENT,
HOW IT RELATES TO AGRICULTURE**

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1. Introduction

Agriculture is always the dominant activity in the first stage of economic development (up to, say, USD 1000/capita/year). And in most countries, 80-90% of food is produced locally. Apart from the mining sector and extractive industries (e.g. oil production), most industrialisation in poor countries (first stage of economic development) is agriculturally-led. Many poor (African) countries with a large agricultural sector (30% and more of GDP, 50% and more of employment, 50% and more of exports) suffer from widespread food insecurity and hunger. In these countries, agriculture is invariably associated with rural poverty, and there has been a failure in agricultural development for several reasons, some of which are explained further.

Agriculture plays a key role in the fulfilment of basic physiological needs (ref. needs pyramid of Abraham Maslow). Hunger and thirst, together with sleep and sex are examples of the basic physiological needs. If the basic physiological needs are not fulfilled, violence may result. Fulfilment of basic physiological needs is a prime driver for the survival of the individual. Threats to survival may easily lead to violence and conflict. The access to adequate food is indivisibly linked to higher needs such as human dignity and self-realisation.

Agriculture, particularly traditional or peasant agriculture is more than just food production for survival. It is also the essence of livelihood in rural areas, and the production aspect ensures livelihood security. By engagement in agriculture, one ensures its entitlement to livelihood security through one's own food production and the generation of cash income, which ensures fulfilment of other physiological needs.

Agricultural production requires resources and the use of these resources. Together with technology and management (decision making), they result in agricultural production. With traditional or unimproved (peasant) technologies, resource productivity is very low, resulting in production which barely or not covers consumption needs. This is also the cause of low income, or subsistence income only. When in addition to low resource productivity, the amount of resources at hand is limited, e.g. through high population density, production does not cover subsistence needs (in kind and in cash). This leads to the struggle for survival, in which access to resources plays a crucial role.

An inadequate resource base (land, water, animals, capital) is at the root of many violent conflicts. Lack of enough resources to ensure livelihood survival (entitlement) is more and more the result of population growth and resource degradation. Population growth and resource degradation (e.g. declining soil fertility, loss of biodiversity, disappearance of fuel wood, ...) often go hand in hand, and are linked. The most frequent response is rural to urban migration.

There is strong evidence that lack of agricultural resources and resource degradation are the root causes of many violent conflicts in sub-Saharan Africa, e.g.

- crop failure and the "Ruriganiza" famine in 1989 in Southern Rwanda as a prelude to genocide in 1994 (Philip Verwimp, doctoral thesis 2003, K.U.Leuven) - see box
- competition for grazing land for livestock among pastoralists in Somalia, the basis for the existence of tribal warlords and continuing violence and conflicts
- conflicts over land, and particularly access to land in ethnically mixed societies such as density populated Nigeria are a continuous source of violent internal conflicts
- the recent violent conflict in Ivory Coast, with about 30% of its population having come from poor Sahel countries (Burkina Faso, Mali), whereby recently titles to land are linked to nationality, seems rooted in disputes over access to land resources
- the on-going conflict in Bunia, Ituri region of R.D. Congo has all the elements of the Tutsi-Hutu rivalry in Rwanda with the Hema as the cattle rearing non-Bantu and the Lendus as the land tilling Bantu. Competition for (grazing) land and for minerals in the land (gold, coltan) coupled with ethnic divisions and hatred forms the bedrock for civil war. The combatants are mostly irregular militias, their victims mostly unarmed and the fighting has gone on for nearly five years since the occupying and plundering Ugandan and Rwandan army arrived. When they recently withdrew, the two largest local tribes, the Hema and the Lendus, then began to fight for control of resources (power).

2. Conflict, food insecurity and poverty

According to FAO, World Food Summit - five years later (10-13 June, 2002) - "Food, Security, Justice and Peace" paper, there is a well established correlation between the exposure of countries to external or internal conflicts, and the deterioration or long-term stagnation in their food security. Most conflicts, and especially the internal

conflicts that have now become the dominant model of mass violence, mainly affect rural areas and their populations. The number of food emergencies has tended to increase during the latter part of the 1990s, from both natural and human-induced factors. This increase has been associated primarily with a rise of conflicts. Of the 1,240 million USD spent by the World Food Programme in 2000 for relief operations (98 million USD in 1978), 715 million or 58% were for man-made emergencies in support of Internally Displaced Peoples and refugees.

In all conflicts, smallholder agriculture - the basic livelihood of the rural poor- is usually hit the hardest. They lose the few assets they have and become very vulnerable. Conflict-related agricultural output losses for all developing countries are extensive, an average of 4.3 billion USD losses per year over the period 1970-1997 (FAO-WFS - five years later). The impact of conflict on food security often lasts long after the violence has subsided, because assets have been destroyed, people killed or maimed, populations displaced, the environment damaged, and health, education and social services shattered. The worst damage is done by landmines which litter agricultural land, and deter people from farming for years. In both 1980s and 1990s, conflict-induced losses in developing countries exceeded the value of total food aid of all types to those countries. In the 1980s they were about \$ 37 billion while they were \$ 29 billion in current prices in the 1990s. Civil wars and conflicts are thus a major cause of development failure in the developing world.

Sustainable (agricultural) development, by redressing the inner causes that make society a fertile terrain for conflict, including food insecurity, poverty and lack of human development in its various dimensions, is a building stone for peace. In most instances of conflict and violence, agriculture or food insecurity is not the trigger, but rather the social seedbed of violence. It creates the conditions and environment for social upheaval and conflict, but usually does not trigger open conflict. Sometime else, an unfortunate event, an accident, a sudden shock in the social system then triggers violence. Food insecurity creates the chronic condition in which violence can occur, but an acute unfortunate event acts as a trigger to unleash the violence. Such a trigger can be any internal or external shocks: drought, pests, migration of people, a collapse in cash crop prices, a new (repressive) government policy, etc.

In R.D. Congo, the "internal" conflict since 1998 has resulted in over 3 million death, has destabilized most of Central Africa by drawing - in neighbouring countries, and

has resulted in food insecurity for almost the whole population. 22% of the increase in food insecurity in the world over the period 1990-92 to 1997-99 comes from RDC (Tollens, 2003). But the conflict now that lingers on has more to do with access to minerals (gold, diamonds, coltan) and pillage of natural resources (timber, biodiversity, ...), not agriculture per se. But violence, food insecurity, and internal displacement of persons is the major consequence.

The downturn in world military expenditures that had followed the end of the cold war came to an end by 1998. After a decline of 37%, world military expenditure rebounded by 2% in 1999 and 3% in 2000, reaching some \$ 800 billion (FAO-WFS - 5 years later, 2002). The increase took place in all regions, with Africa and South Asia, the poorest regions in the world, registering the steepest increases among the developing regions (respectively + 37% and + 23% from 1998 to 2000).

Of the 56 major armed conflicts registered in the decade 1990-2000, only three were of an interstate nature. The state-against-state model is becoming the exception. All others were internal conflicts, although in 14 of them foreign troops were engaged (FAO-WFS - 5 years later, 2002). Most contemporary conflicts take place overwhelmingly in the world's poorer countries (Africa and Asia). Civil wars and conflicts are a major cause of development failure in the developing world.

In most internal conflicts, there is collective violence and it is difficult to distinguish combatants from civilians. And civilians are the main victims of the conflict. And intra-state wars always run the risk of becoming interstate (e.g. Ivory Coast, Liberia, Sierra Leone, R.D. Congo).

A new study by Paul Collier of the World Bank and others¹, which examines the world's civil wars since 1960, concludes that although tribalism is often a factor, it is rarely the main one. Surprisingly, the authors found that societies composed of several different ethnic and religious groups were actually less likely to experience civil war than homogenous societies.

However, in multi-ethnic societies where one group forms an absolute majority, the risk of war is 50% higher than in societies where this is not the case. This is perhaps

¹ Collier, Paul a.o., 2003, "Breaking the Conflict Trap: Civil War and Development Policy", Oxford University Press, 221 p.; <http://econ.worldbank.org/prr/CivilWarPRR/>

because minorities fear that even if the country is democratic, they will be permanently excluded from power.

The most striking common factor among war-prone countries is their poverty. Rich countries almost never suffer civil war and middle-income countries rarely. But the poorest one-sixth of humanity endures four-fifths of the world's civil wars.

The best predictors of conflict are low average incomes, low growth, and a high dependence on exports of primary products such as oil or diamonds. They found that when income per person doubles, the risk of civil war halves, and that for each percentage point by which the growth rate rises, the risk of conflict falls by a point. An otherwise typical country whose exports of primary commodities account for 10% of GDP has an 11% chance of being at war. At 30% of GDP, the risk peaks at about one in three.

Why are poor, stagnant countries so vulnerable? Partly because it is easy to give a poor man a cause. But also, almost certainly, because poverty and low or negative growth are often symptoms of corrupt, incompetent government, which can provoke rebellion. They are also common in immature societies, whose people have not yet figured out how to live together.

Natural resources tend to aggravate these problems. When a state has oil, its leaders can grow rich without bothering to nurture other kinds of economic activity. Corrupt leaders often cement their support base by sharing the loot with their own ethnic group, which tends to anger all the other groups.

Most countries have what Collier calls "ethnic romantics who dream of creating an ethnically 'pure' political entity". If oil is found beneath their home region, their calls for secession suddenly start to sound attractive to those who live there, and abhorrent to everyone else. Oil was one reason why Biafra tried to secede from Nigeria, and why the Nigerian government fought so hard to prevent it.

Three sets of problems contribute to the present African predicament: the weakness of states, their lack of integration in the new international economy and their lack of democracy. Ideally, donors seeking to help African countries should address all three sets of problems at the same time. In reality, this is not possible because of funding and human resource constraints.

3. Livelihood entitlement: the sustainable livelihoods approach

The sustainable livelihoods approach assumes that increasing access or entitlement to capital (or assets) is crucial for ensuring sustainably one's livelihood. A livelihood is defined as comprising "the capabilities, assets and activities required for a means of living" (Dorward et.al, 2001). Sustainability is achieved when a livelihood can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Carney, 1998). It is thus the key to broad-based growth and poverty reduction. Assets take many forms, and in the asset based livelihoods approach, five types of capital are distinguished:

- physical capital, e.g. house, tools, cattle
- natural capital, e.g. land, water, forests
- financial capital, e.g. money, savings, bonds
- human capital, e.g. education, health, skills
- social capital, e.g. member of organizations, family, ethnic group.

There are strong complementarities among capital categories. For example, building social capital by strengthening farmers' groups and improving road and communications networks can enhance the financial asset base. Secure land use rights can allow farmers to invest in technology, leading to higher farm productivity and incomes. They may then invest in improved health and nutrition status and their children's education.

According to the livelihood entitlement approach, assistance must focus on the assets of rural poor, enhance them and strengthen them. Lack of assets is both a symptom and cause of poverty. The poor call upon a range of different assets and activities as they seek to sustain and improve their wellbeing. This includes in particular human assets: better rural health training, and education, but also physical assets: rural infrastructure development, access to markets, improved soil fertility, access to safe water, and increasingly recognized, social capital-access to and the quality of informal networks and local organisations. Social assets, through empowerment, inclusion in decision making processes, mutual self-help mechanisms and mutual micro-finance are of vital importance in coping with adversity. And better technology must help to increase productivity, reduce risks and enhance the stability of incomes.

Smallholders finance, technology, market organization and access to land and water are the classic problems of rural development assistance. These problems must be addressed in a systematic and comprehensive fashion, not haphazard or in isolated cases. Only then can they bear directly on production and income of the rural poor. And there is a large role for public sector institutions in this area, by the provision of agricultural services such as research, extension, education, micro-finance, infrastructure, market organization. But this needs to be coupled with substantial private investment in the agricultural sector - particularly in services, processing and trade in order to have large impact. Thus the investment climate is important, as is empowerment.

Thus, livelihood entitlement, by redressing the inner causes that make society a fertile terrain for conflict, including food insecurity, poverty and lack of human development, in its various dimensions, is a building stone for peace. Where opportunities are created for a more equal access to physical, natural, financial and institutional resources, sustainable livelihoods are possible. It is obvious, however, that sustainable development cannot take place in the midst of actual or potential conflict, and that protracted conflicts destroy livelihood entitlement and perpetuate poverty. But in poor countries, agriculture is invariably the lynch pin of livelihood entitlement and economic development.

4. Agricultural growth, comparative advantage, stage of development and industrialisation

Most countries in sub-Saharan Africa are rich in agricultural resources - they have substantial natural assets for agriculture and have a definite comparative advantage in the agricultural sector. This depends very much on the stage of economic development as comparative advantage shifts in the course of economic development. This is also why industrialisation in the first stage must be based on agriculture. Continuous improvements in agricultural productivity then open up opportunities for migration out of agriculture and diversifying industrial development, particular via small- and medium-sized enterprises. Several fast growing industrialising Asian countries, such as China, Malaysia, Thailand, even India are following this path. And Japan, South Korea, Taiwan and some other industrial countries have previously had rapid agricultural development as a pre-condition for industrial development. The

case of Japan which had its agricultural revolution in the period 1863-1912, which laid a sound basis for industrial development, is well documented (Yujiro Hayami et al., 1975). In all these cases, agricultural development was based on science and technology, not custom and traditional ways of production.

The critical role of agriculture and agricultural development, leading to rural poverty reduction, at the first stages of economic development, is nevertheless often poorly understood. The critical role of agricultural development can only be well appreciated if one takes into account the following:

- the comparative advantage of the agricultural sector
- the capacity of the agricultural sector and agri-industries to absorb large amounts of labour (as a parking ground for later industrialization) - no other sector can do likewise
- the labour-intensive character of agriculture and agri-industries for modest investments
- availability of adapted technologies at relatively low cost
- agriculture produces food crops which are at the basis of livelihood security
- the broad based income generation effects, and multiplier effects, which the agricultural sector brings. Agricultural growth is almost always equitable (except maybe plantation agriculture) and often favours women, particularly in food production and -processing. A large number of people share in its benefits. Agricultural growth is thus high quality growth and the quality of growth matters a lot. Growth in other sectors of the economy is also important, but it carries a much larger risk of increasing inequalities and resulting in uneven development, with a small number of people capturing most of the benefits. This can be said to be low quality growth. Agricultural growth means assets accumulation by large numbers of smallholders, increased productivities and expanding incomes for many, and it is usually sustainable
- agricultural growth very much determines economic growth in sub-Saharan countries, as such growth creates market opportunities for other sectors, directly or indirectly. Agriculture must thus be the engine of growth at the present stage of development
- high quality growth is sustainable and PRO-poor, PRO-women and PRO-environment.

Most developed countries have no comparative advantage in their agricultural sector, which usually employs only 2-5% of the active population. Because labour is expensive, capital investment in agriculture is very high, and as a result, also agricultural productivity. But typically incomes in agriculture lag far behind those in the other sectors of the economy ("the income disparity gap"). And because farmers are well organized, and have strong lobbies, they receive protection and large subsidies from their governments.

The total public support for agriculture in OECD-countries now amounts to about one billion USD per day². And because of positive protection and export subsidies from the industrialised countries, poor developing countries suffer in the realization of their agricultural development and comparative advantage. That "rich" countries support the incomes of their farmers can be seen as their business, but that they also give production-tied (coupled) subsidies and subsidize exports, and operate barriers for agricultural imports from poor countries, and thus make it very difficult for poor countries to lead an agricultural export-led economic growth strategy is shameful and unethical. Lack of access to rich countries' markets is crucial for poor countries to develop economically. For this reason, initiatives such as the European Union's "Everything - but - arms" for the very poorest countries, which eliminates all barriers on imports, need to be expanded to all poor developing countries where agricultural development is their ticket out of rural poverty. Moreover, the transition period for sensitive products, presently up to 2006 for bananas and up to 2009 for rice and sugar appears quite long and unnecessary.

One also needs to recognize that poor agricultural performance in the past does not exclude rapid spurs of agricultural growth in the future, e.g. the Green Revolution in India in the late sixties and seventies. Moreover, there are success stories in agricultural performance in sub-Saharan Africa, e.g. cotton in West Africa, (e.g. Mali produces 600.000 ton, Benin over 400.000 ton), cocoa in Côte d'Ivoire (40% of world production), rice production in the Office du Niger in Mali, onions in Niger, cassava in Nigeria, cut flowers in Kenya, etc.. And all these successes point to favourable

² This contrasts sharply with total ODA-development aid which is around 55 billion USD per year. Out of the total OECD-countries support for agriculture - 362 billion USD (or 1.4% of GDP) about 80-90 billion USD goes to export subsidies, undermining the ability of developing countries to compete effectively on world agricultural markets.

investment- and marketing conditions, a large public supportive role, and the importance of agricultural research, technology development, extension, input delivery and credit³.

According to Nicholas Stern (2002), chief economist at the World Bank, the investment climate - which leads to growth, and empowerment - which leads to poverty reduction, particularly via education (of women), social protection (safety net) and inclusion in social organizations, are the pillars for a strategy for pro-poor growth.

It is only now that it is generally acknowledged that growth can only be truly sustainable when poverty is explicitly taken into account. And there is no viable alternative for rural poverty reduction than smallholder development as an engine of income growth.

5. Why do the rural poor matter and the nature of their poverty

5.1. The nature of rural poverty

One out of five of the world inhabitants - about 1.2 billion people - live in extreme poverty. This is now commonly understood as living with less than one dollar a day⁴. Their poverty is not only a condition of low income, low consumption and lack of assets. It is above all a condition of vulnerability, exclusion and powerlessness⁵ which the lack of assets entails. More than two thirds of them are in Asia; South Asia alone accounts for nearly half of them. About one fourth is in sub-Saharan Africa, and this share is expected to increase.

Poverty is largely a rural phenomenon⁶ - some 900 million people - 75% of the world's 1.2 billion extremely poor - live in rural areas. In sub-Sahara Africa, it is 80%.

³ IFPRI is presently documenting agricultural success stories in sub-Saharan Africa.

⁴ The "standard" dollar-a-day poverty threshold is commonly used for international comparisons. This poverty line adjusts for differences across countries and times in Purchasing-Power-Parities (PPP). At this line, a person obtains a "global consumption bundle" worth USD 1 per person per day in constant purchasing power of 1993. For more on the measurement of poverty, identifying the poor and adding the numbers up, we refer to IFAD (2001), pp. 18-20.

⁵ Throughout this paper, references are made to the following IFAD publications: IFAD, March 2002, Enabling the Rural Poor to Overcome their Poverty, Rome; IFAD, 2001, Rural Poverty Report 2001 - The Challenge of Ending Rural Poverty, Rome; IFAD, 2001, Assessment of Rural Poverty, Western and Central Africa, and: 2002, Eastern and Southern Africa, Rome.

⁶ The definition of rural as opposed to urban is important in the measurement of rural poverty. National distinctions between rural and urban are arbitrary and varied (see IFAD (2001), pp. 17-18).

Rural poverty reduction must therefore be given priority if the Millennium Development Goals, particularly the one relating to poverty, are to be met.

There is quite an academic debate whether poverty has reduced or increased over the last two decades (Deaton, June 2002). Two recent World Bank reports came to different conclusions on the evolution of poverty, on the basis of the same data set, but different analytical methods (World Bank, 2001a) (World Bank, 2001b). And both reports are truthful - poverty has lightly progressed from 1987 to 1998, and has considerably regressed from 1980 to 1998. It all depends on how poverty is measured in China and India. More than one-fourth of the poor in the world live in India. According to Shaohua Chen and Martin Ravallion (2000), more than 200 million people in China have been lifted out of poverty during the last two decades. Part of the problem is one of measurement on the basis of household surveys, or on the basis of the national accounts of a country. Also, the World Bank is the only global institution publishing original estimates of the number of poor in the world.

For the purposes of this paper, it suffices to state that for most of sub-Saharan Africa, except for a few countries such as Ethiopia and Uganda, there has been little poverty reduction since the late 1970s, but a fall in the exceptionally high ratio's of rural to urban poverty. Often some reduction in rural poverty is accompanied by increased urban poverty as rural poor have moved to cities, without finding employment and income there. In contrast, successful rural poverty reduction usually works by raising the productivity of the poor, while most urban poverty alleviation efforts are social welfare-oriented. Moreover, rural poverty alleviation may reduce migration, thus helping to reduce urban poverty of the future.

It is now recognized that for some farming systems in marginal, resource poor areas, the best strategy may still be to move to other, better endowed areas or cities. This is now, for the first time, explicitly recognized in FAO's pioneering study on the link between farming systems and rural poverty (see John Dixon, 2002)⁷.

The most common definition of the borderline is 5.000 persons, but it is 10.000 ore more, as in Nigeria, or it depends on various characteristics, as in Brazil and China. We explicitly recognize the importance of peri-urban agriculture ("rural in an urban setting") and the increasing difficulty of distinguishing between rural and urban.

⁷ <http://www/fao.org/ag/magazine/GFSS.pdf>

Poverty is not an intrinsic attribute of people, but a product of livelihood systems and the socio-political forces that shape them.

There is chronic and transient poverty, and they may demand different remedies. A household is chronically poor if its mean income is below the poverty line, while a household is transitorily poor if its mean income is above the poverty line but its annual income falls below the poverty line at least once during the period of analysis.

There are intimate links between rural poverty, food security and agricultural development. Most rural people find their livelihood in agriculture, directly or indirectly. Agriculture is also the principal source of savings, taxes (mainly at export) and public finance. Most sub-Saharan countries, with a few exceptions (Nigeria, Botswana, South Africa, ...), at the present stage of their development, are really agricultural states. But agriculture is typically poorly performing, under-capitalized and not really competitive at the international level. Agricultural growth is only 2% per year for 25 African countries, and 4% in 17 other.

"Agriculture" is to be understood here in its broadest sense, comprising crop and animal production, fisheries, forests and upstream and downstream sectors: agri-business, the agri-food chain and transformation/processing of agricultural products. It includes smallholder- and peasant farm production as well as large plantation agriculture in the forest belt. Agricultural development must thus be seen in the context of an emerging value-adding chain and industrial development rooted in agriculture. The point in all this is to strengthen what rural people consider essential in improving their livelihood entitlement, including non-agricultural activities where these are relevant and viable.

5.2. Why do the rural poor matter?

As poverty in sub-Saharan Africa is mainly a rural phenomenon, the rural poor really matter in agricultural development and, by extension, in overall economic development. Experiences are that the poor, when given economic opportunities, seize on it and respond to economic incentives. This has been shown time and again, and warrants the focus on the rural poor as the foundation of economic growth and development. As the poor respond eagerly to economic incentives, they are efficient with the resources and technology at hand, save whenever they have a chance and pay

back credit on schedule. This has been confirmed in Grameen bank type credit schemes in Africa and proves that poor rural people are creditworthy risks and in the end, a good investment. But because there are so many rural poor, and because the amounts involved per person or household are so small and the poor lack collateral, administration costs can add up. This is why a local, decentralised approach is needed and why commercial banks, usually located in cities, are usually not interested in lending to them.

Lifting the rural poor out of their poverty, breaking the poverty circle, through investments in their basic capital stock (physical, human, social) thus appears as sound economic strategy with the added advantage that such economic growth is high quality growth and by definition broad-based and equitable. But that lending to the poor is potentially a wise investment is often not acknowledged.

But rising out of poverty is no guarantee against falling back into poverty. Civil strife and war, natural disasters, financial crises, migration and degrading natural resources disproportionately increase the insecurity and instability of the rural poor. Thus, assets stand central in the ability to withstand shocks and cope with vulnerability. And it is the access to assets and free markets that matters.

According priority to the rural poor means taking on the challenges of a world that is rapidly transforming, and assuring that the rural poor are not left behind. Global interdependence, decentralization and rapid development of civil-society organizations present many opportunities, provided the rural poor can influence the institutions, policies and decisions that affect their lives. As things stand, the rural poor rarely choose or control the conditions under which they earn their livelihoods. And among the highly diversified poor rural populations, one significant group stands out: women. The majority of women still remain economically and politically marginalized, although their contributions to the resilience of rural households and their potential as agents of change have been acknowledged.

We must therefore recognize that gaining control over major decisions that affect his or her welfare (empowerment) is a key element of human dignity for any individual. Thus, lack of access to assets and lack of reflection of the interests of the rural poor in key political, economic and institutional processes - lack of empowerment - go together. Both together are the immediate causes of rural poverty. The problems of

the rural poor are very often paternalistically viewed as existing somehow outside the basic framework of market competitiveness and asset accumulation - as being not rational persons or not motivated by income (as was often the case in the colonial period). In fact, it is precisely their lack of assets (five types of capital) that does not entitle them to livelihood security.

6. The decline in international financing for agricultural development

International financing for agricultural development declined by nearly 40% from 1988 to 1998 and is at an all time low as share of overall development aid. This contrasts sharply with the centrality of agriculture as the primary livelihood for the rural poor. Why then have so many donors turned away from agriculture and rural development? Even in the World Bank sponsored Poverty Reduction Strategy Papers (PRSP), the agricultural sector is downplayed.

The World Bank lending is a case in point: in 1999-2000, only 8,5% of lending in sub-Saharan Africa was spent on agriculture, as against 21,2% in the 1985-89 period (IFAD, 2001, p. 26). For most donors, the decline in agriculture's share reflects the increased importance attached to social services and social and economic infrastructure development. It also reflects the view by some that the establishment of appropriate policy frameworks, which will induce private investments, will sufficiently raise agricultural productivity and alleviate poverty. This is however doubtful.

Many donors are of the opinion that there were too many failures - non-performing projects - in agricultural and rural development, and that therefore new approaches are needed. This often results in more tied aid and less aid for public institutions and public services. The impression gathered is that we are back to trickle-down theory, and that rural poverty, which is overwhelmingly a rural phenomenon, is being attacked not via investments in its core activity, but via other, indirect activities, or at the macro-economic level. Granted that policy improvements are important, to be effective they need to be accompanied by investments in the sector most concerned, either public or private. The declining support for agriculture is thus extremely damaging to efforts to reduce poverty and hunger.

7. Agricultural development and poverty alleviation - important lessons learned - what works?

After more than a decade of structural adjustment (SAP) and economic liberalization in sub-Saharan Africa, in the face of declining donor support for agriculture and the rural sectors, and renewed emphasis on poverty reduction and locally based development initiatives (e.g. NEPAD), important lessons have been learned.

Hereafter follows a list, which largely reflects a personal assessment:

- trickle-down does not work for rural poverty reduction. Rapid economic growth in one sector of the economy (e.g. mining, forestry exports, oil production) usually does not affect the poor. Attacking rural poverty requires broad based economic growth (e.g. smallholder agricultural development) and specific targeted actions for the poor (e.g. micro-credit focused on women)
- reduced public expenditures, such as a result of SAP, affect first of all the poor, because of increased health and education costs, and other (unaffordable) public services. A public social protection safety net targeted at the poor is absolutely necessary. But targeting is difficult, and without targeting the costs may become prohibitive. But it is more important that the very poor are reached, than that some non-poor also benefit from the scheme (which is unavoidable)
- many African governments are reluctant to face-up straightforward to the poor. They are still largely hidden, unacknowledged and without power. The usual focus is still on the productive, educated, urban-based, male, assertive part of the population. Giving the poor a voice, incorporation in public programs, empowerment etc. (livelihood entitlement) is all too often left to NGOs and is not a public concern. Also, the development potential of the poor, their capacity to save and invest (very small sums) and to contribute to economic development is still largely ignored. This also extends to university level courses in economic development in African universities which often fail to address poverty, poverty assessment and poverty reduction (as a subject, not as a by-product of economic growth). The focus on poverty is still too much a concern of northern donors and international institutions. There are a few exceptions: Uganda, Ghana, South Africa,...

"How does it affect the poor?" should be one of the most frequently asked questions in ministries, but unfortunately it is not. Too many decision makers are content

with a statement that "... it will also benefit the poor" (ultimately - via trickle down). Prioritising public investments by taking account of their direct incidence on the poor, knowing that one dollar of income more for the poor has much greater weight than one dollar more for the average citizen, should become standard operating procedure if poverty alleviation is to be taken seriously

- agricultural development requires incentives (favourable prices) and publicly supported agricultural services and institutions: agricultural research and extension; agricultural education; input supply (e.g. seeds) to the extent that the private sector is not performing; agricultural credit, particularly micro-finance where private banks are non-performing; marketing infrastructure, in particular roads, communication, transport. The critical role of the government in agricultural development is often poorly understood.
- labour, particularly as it affects women in agriculture, is often a major constraint on agricultural performance. Animal traction, also in transport, small-scale post harvest operations (drying, milling, processing) and rural water supply (pumps) can go a long way in alleviating the burden on women. NGOs can play and play a major role in this respect
- most agricultural research is "scale-positive" in the sense that the outcome of research is more quickly and readily available to the large-scale farmers who have better access to the requisite information, resources and credit (Evans, 1998). Research on the impact of the Green Revolution showed that larger farmers initially gained the most, but even the smallest farmers eventually gained too, while the urban poor profited the most from the greater availability and lower real prices of their staple foods. Nevertheless, research for innovations of specific advantage to the poor farmers has often failed, or was not a success, or more endowed farmers took most of the advantage
- often stability in yields, and less risk, is more important for the rural poor than higher yields per se. There is still great potential in improved varieties - resistant to pests, improved crop rotations, fallow management with legume crops, small doses of organic and inorganic fertilizers for integrated soil fertility management. And wrapping up fertility and pest resistance in the seed rather than in agrochemicals, if feasible, helps sustainable management of natural resources. Thus, pro-poor, sustainable technical progress should, besides yield enhancement and labour-intensity, also seek robustness, resilience and stability

- in the economic liberalization and free trade environment of today, poor farmers are more fully exposed to the demands of markets and vulnerable to their volatility. But market access is often difficult because of low population densities in rural areas, remoteness from centres and high transport costs. These are real physical barriers in accessing markets. And giving better access to markets for the rural poor is often costly and difficult, particularly in remote or enclave areas
- economic liberalization and private sector development have increased "efficiency" in the economy, but the benefits are usually very unevenly spread, and most of the poor do not benefit. Free market economics does not necessarily lead to more equity, equitable income distribution, equal opportunity or better access to vital public services. Often, to the contrary! Private monopolies are also far worse than public monopolies. Minimal public services (education, health, transport, credit, input supply) are needed for addressing rural poverty. These services can be provided by private entities, but there must be a minimal public financing and control. Because targeting is difficult, often nothing (public) is done
- a conducive policy environment, good governance and thus good public management is now more and more recognized as a necessary condition (but not sufficient) for aid to really work. Burnside and Dollar (1997 and 1998) have shown with panel data that aid spurs economic growth only in a good, conducive policy environment. Moreover, in countries with relatively good management, aid has a powerful effect on reducing infant mortality. There is no effect in countries with weak economic management - evidenced by poor property rights, high corruption, closed trade regimes, and macroeconomic instability. And in such countries, development projects promoted by donors tend to fail.

8. Increasing livelihood entitlement, how it relates to agriculture

"Hunger anywhere threatens peace everywhere" (M.S. Swaminathan, 1994). "Poverty and deprivation are seen as underlying causes of endemic conflict and civil violence" (The Bruntland Commission, 1987). Much of the deprivation is rural, with seven out of ten of the world's poor (less than 1 USD income per day) living in rural areas.

According to FAO, the number of undernourished has been declining by 6 million a years since the 1996 WFS. This is far from the target which is now at 22 million per year. Few countries, and particularly China, have significantly improved since 1990

their food security while the majority of the poor countries, particularly in Sub-Saharan Africa, have suffered deterioration.

Conflicts are fuelled by poverty inequality and discrimination. What triggers revolt is not only "absolute" but "relative" poverty as well. The "conscience" of inequality has risen with globalization, particularly the mass-media. Many have-nots now identify inequality with injustice. International inequality has dramatically increased the gap between the richest and poorest regions of the world.

Increasing livelihood entitlement implies creating and enhancing the five types of capital or assets that persons have (recapitalisation of rural areas). It is only through a better asset base that higher sustainable incomes will be derived and that vulnerability to shocks will be reduced. It also means that people's opportunity costs for joining a local rebel group or militia is increased, which makes it less likely as people have more to lose. If the quality of life in rural areas improves, fewer conflicts will emerge.

Poverty thus is linked to frustrated capabilities due to asset deprivation, inability to afford decent health and education and lack of power. Low consumption is only one dimension; others are malnutrition, illiteracy, low life expectancy, insecurity, powerlessness and low self-esteem. Poverty is multidimensional and therefore poverty reduction efforts must be multi-targeted - they must encompass economic, social, political and institutional factors. This makes poverty alleviation a most difficult task, if one aims at sustainably lifting the poor out of poverty.

Agricultural change can work to reduce poverty, but only when linked to social changes that give the poor greater power over the social factors that determine their livelihoods. Thus, the answer to rural poverty is not just agriculture, although this is a big part of the story. Equally important are empowerment and a favourable investment climate, also for the poor, which create an enabling environment and incentives. The main challenge is to enable the rural poor in helping themselves out of poverty through increased access to resources (assets), markets and institutions. This is a daunting task. If we fail, we will have in a decade or less a major focus on urban poverty, as the rural poor will have undoubtedly moved to the cities, where welfare services are usually better. But the rural poor offer much better prospects in economic self-sustaining, equitable development (quality economic growth) through

agricultural and rural non-farm (often farm related) productive activities. Once they join the urban poor, it becomes more difficult to put them on a sustainable path out of poverty, as they may settle in an urban welfare safety net, even if there are big holes in it and if it is far from adequate. If we don't lift the rural poor out of their precarious situation over the next decade, the task awaiting the international community may be even more daunting and impossible. This is why a PRO-poor, PRO-women, PRO-environment approach to agricultural development is so important.

Agricultural development, as part of economic and social changes that give the poor greater power over the productive resources and the social factors that shape their livelihoods, is indispensable to the enhanced food security of the rural population and to a more peaceful and stable environment. Equitable growth and pro-poor policies are critical not only to prevent the outbreak of conflicts but also in the immediate post-conflict situations (FAO-WFS-5 years later, 2002).

9. The way forward

In poor countries, lack of agricultural development is closely linked to rural poverty. And such poverty, which also implies low opportunity costs of people, makes them prime candidates for joining rebel groups or engaging in local civil conflicts. When you have nothing to lose, anything is better than scavenging everyday for the means of survival. But the links between agricultural development, rural poverty, destitution and local conflicts are usually complex and loose. Other factors intervene such as agrarian structures, the presence of (point) lootable income, ethnic strife and poor governance. Violent conflicts can only last for some time when they are viable, i.e. when they find a favourable seedbed for their emergence and spread.

But the literature also teaches us that in the not so poor countries, particular conditions may also give rise to civil conflicts. In particular, lootable resources (minerals, perennial crops, cattle, etc.) in the presence of gross inequities (ethnic discrimination, income inequality, political repression, lack of due process, etc.) can also lead to internal armed conflicts. Growing income and wealth disparities are breeding grounds for violence and conflict. There is only so much in terms of inequity that people can tolerate.

The recent history of Côte d'Ivoire, a not so poor West African country, often called the elephant of West Africa, illustrates what can happen when large income and wealth inequalities (between the South and the North of the country) are coupled with political discrimination of long time residents of foreign origin. What was once considered a beacon of political stability and an economic success story, a model for other countries, has evolved into a situation of continuing internal conflict and instability. The lootable resources here are perennial crops, in particular cocoa (40% of world production) and coffee plantations, palmoil and rubber and bananas. The uncertainty of land tenure regarding in particular the cocoa plantations, when most of the recent plantations were established by immigrant Malinke residents, and the refusal to grant them citizenship, has certainly created the seedbed for internal conflict.

It is thus clear that agricultural development in a poor country is a necessary but not a sufficient condition. Such development must also be broad based and equitable, with all sharing in it, and good governance in a broad sense. This includes security of property rights, broad based and transparent participation in political decision making, a stable regulatory framework and reliable public institutions. These constitute the sufficient conditions which will minimize the chances of internal conflict. But it is often difficult to institute such conditions, as a particular class of decision makers often has economic interest in maintaining exploitative conditions and impunity. Only pressure from below, a drive toward equity and democratic process can change the power structure and asset ownership. In a democratic process, changes are usually slow but incremental. In a conflict mode process, especially if it is armed, changes can be made very quick as such changes occur under force, but it is always doubtful whether such changes are durable or sustainable. The way forward is certainly agricultural and rural development in poor, conflict prone countries, but such development must be broad based and equitable, in an institutional framework that ensures asset security and a voice in political decision making ("good governance" in a broad sense). Only then can livelihood security be enhanced in a sustainable way and can the probability of internal conflicts arising locally be minimized. In this way, poor people acquire livelihood entitlement, i.e. a strong enough capital base (physical, financial, natural, social, human) to weather shocks and to ensure minimal living conditions (basic needs) at all times.

Epilogue

Development economists, poverty economists a.o. so far have largely neglected the link between agriculture and peace. Conflict and violence, including war is largely outside their expertise. It seems like an "inevitable" event, when all else fails. Moreover, the possible link between agricultural development, food security and peace is largely neglected and poorly understood.

In an era where the "war on terrorism" dominates international public policy and international relations, and where potential conflict, violence and war are at the centre of public attention, it is time the link between agriculture and peace is recognized and properly understood. Agriculture is an obvious focus for conflict prevention.

Invariably, the economic cost of violence and war is very high and far outweighs the cost of agricultural development and peace. This needs to be better studied and recognized by policy makers and politicians. "No peace without development and no development without peace" should be the leitmotiv of development economists, donors and policy makers in rich and poor countries alike.

Case Study

Agricultural Policy, Crop Failure and the "Ruriganiza" Famine (1989) in Southern Rwanda: A Prelude to Genocide?

based on

Philip VERWIMP⁸

K.U.Leuven, Leuven, June 2002

In the second half of the eighties, Rwanda entered a period of economic decline. Food production per capita declined, low coffee and tea prices, unfavourable weather conditions, unsolved refugee questions, demographic growth, mounting corruption and political unrest characterised this period. With the fall of the Berlin wall, western donors began to demand democratization, also in Rwanda. On top of a drought and a local crop failure in 1989 came a rebel invasion from Uganda in late 1990. These rebels were the offspring of the 1959 Tutsi refugees who had not been allowed to return to Rwanda. The government argued that Rwanda did not have enough land to settle the former refugees which were mainly cattle-herders.

In the subsequent years, Rwanda experienced a growing demand for democratization both from opposition parties within the country, from the donor community and from the rebels. From 1990 to 1993 a series of battles occurred between the rebels and the government forces, the latter winning these battles with the support of French paratroops. A peace agreement was signed in Arusha in 1993. Hard core leading party supporters however did not accept power sharing with the rebels and had already begun preparing large scale massacres of the civilian Tutsi population from the beginning of the civil war. The ensuing genocide took place in 1994.

The Ruriganiza famine was not a real famine in the sense that thousands of people died from hunger. Rather, it was a prolonged period in which a serious food crisis broke down the fabric of society, a creeping agricultural crisis, the result of several years of hardship in which households had depleted their resources and could not

⁸ VERWIMP, Philip, June 2002, "Agricultural Policy: Crop Failure, and the "Ruriganiza" famine (1989) in Southern Rwanda: A Prelude to Genocide?", Center for Economic Studies, K.U.Leuven, Leuven, Discussion Paper Series DPS 02.07; <http://www.econ.kuleuven.ac.be/ew/admin/default.htm>

cope anymore with another crop failure. Many families migrated to other areas in Rwanda and abroad.

Several reports published by a research team from Michigan State University show a clear and dramatic decline in yields of all major crops between 1984 and 1991 (Byiringiro, F. and T. Reardon, 1996). Over this period, per capita food production dropped by 25%. The driving force behind declining land productivity, soil erosion and declining per capita incomes is population growth. Platteau (2000) stated that for Rwanda "... population growth has reached extremely high levels without giving rise to major technical progress susceptible of providing a decent livelihood to the growing number of people living on the land", in opposition to the Boserupian model of population-induced agricultural intensification.

The Rwandan government did not react to the crop failure; it did not provide food or other aid and thus allowed a crop failure to develop into a famine. The refusal to accept that famine struck Southern Rwanda had everything to do with the ruling principle of food self-sufficiency. The non response to famine was to allow a Malthusian final solution to happen, namely to equilibrate population with resources. Acknowledging that famine existed would have been the same as saying that Rwanda could not feed itself, the latter being the cornerstone of President Habyarimana's regime. The government thus refused to acknowledge that its policy had failed. A second reason for the regime to passively allow the population to starve was that the people living in the famine struck region had never been in favour of the President, who was from the North of the country. A third reason was that the famine-struck prefecture Gikongoro and parts of Butare had a large Tutsi population.

Famine only occurs when governments allow it to take place. This is what happened in Rwanda in 1989. Once all the land was put into cultivation, peasants were unable to keep food production and population growth in balance because insufficient attention was paid

to technological innovation, fertilizer use, credit and market development. In any case, the story of the crop failure in southern Rwanda, and the strategy of preventing food aid, gives ample evidence that the government knowingly allowed famine to occur. This process created the seedbed for genocide. The famine that occurred in two prefectures in the South caused the emigration of 10.000 citizens to Burundi and

Tanzania, of which many Tutsi. Traditionally, Tutsi are cattle-keepers and the government in its drive for self-sufficiency conducted an anti-pastoral policy. A pastoral way of life had become impossible in Rwanda. This is why the government also did not allow Tutsi's living abroad to return to their country.

The genocide which occurred in 1994 had been the subject of many studies by genocide scholars. All agree that many factors have intervened, but it is argued in particular that more attention should be given to study the links between famine and genocide. Genocide is obviously the most extreme form of internal conflict. In the Rwanda case, the link has been established as this case study by Philip Verwimp shows.

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