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A background paper

Natural Resource Tenure



Table of Contents

Forword.....	3
1. Introduction.....	5
2. Policy and method framework	7
The swedish policy for global development.....	7
Sida and global goals for reducing poverty	8
Millennium development goals	8
Paris declaration on aid effectiveness	9
OECD/DAC guidelines for poverty reduction	9
OECD/ DAC promoting pro-poor growth in agriculture	10
DAC guidelines on conflict, peace and development cooperation	10
EU land policy guidelines.....	10
Key development actors in the natural resource tenure area.....	11
3. Why resource tenure matters.....	12
Secure resource tenure for poverty reduction	12
Natural resource tenure and food security	13
Natural resource tenure and pro-poor growth.....	13
Natural resource tenure and governance	13
Natural resource tenure and corruption.....	15
Resource tenure and human rights	18
Resource tenure and gender equality	18
Resource tenure and HIV/AIDS	19
Traditional knowledge and indigenous peoples	20
Natural resource tenure and environment	21
Natural resource tenure conflicts.....	23
4. Key concepts and terminology	25
What is natural resource tenure?.....	25
Major categories of resource tenure.....	25
5. Tenure issues for different resources	28
Land for agricultural production in rural areas.....	28
Urban land.....	33
Water	36
Wetlands/coastal resources.....	41

Rangelands	44
Forest land.....	46
Protected areas and wildlife	51
Genetic resources.....	55
Petroleum and minerals.....	61
Conclusion	62
6. The role of Sida in resource tenure	64
What can Sida do?.....	64
1. Actions within the framework of PRS, budget support and a sector-wide approach.....	64
2. Programmes/projects not primarily NRT	65
3. Projects/programmes primarily addressing NRT.....	65
4. Resource tenure for specific groups.....	68
5. Different areas of resource tenure	69
6. Donor collaboration	73
Annex 1 MDG specific targets and indicators for natural resources.....	74
Annex 2 Human rights in relation to natural resources	75
References.....	76
Sida documents.....	76
General references	77
Specific area references	78
Glossary of organisations	85
Contributors to this document	87

Foreword

In many developing countries, poor and marginalised groups – in the countryside as well as in cities and towns – depend on natural resources for their livelihoods and shelter. But their access to these resources is often insecure, if not missing completely.

Development of slums begins with the recognition of people's rights to live there. Court cases in the developing world are to a large extent related to land rights. Typically, the poor have difficulties defending their rights against those more powerful. A farmer with insecure tenure might not dare to invest and develop the farm, which is a form of insecurity that in turn affects production. In particular, female farmers in many parts of the world live in uncertainty regarding their resources, due to customs that prevent them from owning land or inheriting property if their husbands die. Losing access to land often means losing access to water. Without clear and generally accepted agreements regarding utilisation of forests, water or pastures, there is a high risk of overuse and degradation. These are just a few examples showing how pro-poor natural resource tenure is extremely relevant to poverty reduction, environmental sustainability, gender equity and protection of human rights.

In May 2006 Sida began a consultative process in order to discuss and define a common approach to natural resource tenure. *Natural Resource Tenure – a position paper for Sida* was published in August 2007. It advocates a more holistic approach to tenure and natural resource governance, highlighting the diverse and complex character of tenure issues all over the world, while emphasising the interdependencies between different resources and their uses.

The present document was originally a working document in formulation of Sida's position. It gives an overview of the many ways in which Sida's actions, policies and other positions are related to tenure issues. Both papers are broader in scope than many tenure documents, in the sense that they cover agricultural land as well as urban land, water, wetlands, coastal areas, forests, rangelands, protected areas, genetic resources and, to some extent, sub-soil resources. They also show how different development priorities such as pro-poor growth, environment, gender equality, democratic governance, and peace and security relate to natural resource tenure.

By publishing *Natural Resource Tenure – a background paper* for Sida, we wish to provide additional support to Sida staff – as well as a wider circle of readers – in their analysis and dialogue, and in their development and

implementation of policies and programmes. The views represented in this background document might not necessarily represent Sida's position, but nevertheless provide a broad base for further analysis and exploration of these issues. Useful references to literature and institutions are also included.

Successful tenure interventions require cooperation between actors with many different areas of expertise. This paper will hopefully draw attention from many different readers and stimulate such cooperation.

Jan Bjerninger
Head of Sida's Department for
Natural Resources and the Environment

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1. Introduction

There is no question that reducing poverty is an urgent task for the Swedish International Development Cooperation Agency, governments and other donor agencies. As part of the international development community, Sida is committed to the Millennium Development Goals – the principal goal of which is to halve extreme poverty by 2015.

National resource tenure rights policy has a bearing on the Swedish “Policy for Global Development.” This policy applies to all policy areas and the central goal of Swedish development cooperation, which is to help create conditions that will enable the poor to improve their lives. Sustainable poverty reduction requires access to resources. In many developing countries, access to land, water and related production factors is the only way poor rural and urban households can develop sustainable livelihoods. The manner in which resources are regulated and property rights enforced determines the opportunities for the poor to:

- ensure their household food security;
- earn income by producing marketable surpluses;
- accumulate capital and assets;
- access financial services;
- invest in alternative income-generating strategies;
- use their own labour to sustain the natural resource base;
- build reserves to cope with drought;
- preserve their assets during periods of political or economic crises or agricultural stress.

The opportunities that resource tenure reforms present for reducing poverty creates urgency for Sida and the donor community to offer support to partner governments in order to accomplish these reforms successfully.

This paper has emerged out of a growing interest on the part of Sida to better understand the complex issues of natural resource tenure and the growing recognition within Sida that natural resource tenure is a fundamental development issue. The purpose of the paper is to:

- a) present an overview of the central role of natural resource tenure (NRT) in poverty reduction and sustainable development;
- b) assist in identifying Sida’s approach to natural resource tenure issues
- c) highlight some entry points for Sida’s continued activities concerned with natural resource tenure.

The EU land policy guidelines provide a framework for Sida's continued activities in this field. The EU guidelines mainly focus on rural land and its links to agricultural and rural development and economic growth. Even though the footnote of the preface of the EU policy and operational guidelines states that a broad range of natural resources – such as trees, pasture, water, game animals and fish stocks – are covered under “land”, these resources are not dealt with in detail, and urban land is omitted. Since, in addition to agricultural land, distinct tenure arrangements apply to the other natural resources, key policy frameworks and key issues related to these resources will be explored in this paper.

Chapter 2 describes Sida's policy framework. Chapter 3 examines the link between resource tenure rights and poverty reduction from the perspective of Sweden's major development priorities. In chapter 4, key concepts are introduced. Chapter 5 will specify tenure issues for different kinds of resources, i.e. agricultural land, urban land, water, wetlands and coastal resources, forests, protected areas and wildlife, genetic resources and, very briefly, petroleum and minerals. Chapter 6 gives tentative recommendations and possible entry points for Sida's continued role in the field of natural resource tenure.

The views expressed in this document are not necessarily shared by Sida.

2. Policy and method framework

The Swedish policy for global development

Within the frameworks established by the Swedish Government and Parliament, Sida develops policy documents and methodologies for its own work.

The Swedish “Policy for Global Development” applies to all policy areas. The central ‘component elements’ of the policy constitute the building blocks necessary for the development of a society that intends to abolish poverty. The goal of the policy is to contribute to equitable and sustainable global development. Its focus is on poor people and poor countries.

The policy will contribute to the achievement of the Millennium Development Goals. It is proposed that two perspectives permeate all parts of Swedish development cooperation: *a rights perspective* based on international human rights law, *and the perspective of the poor*, which means that the needs, interests, capacity and conditions of the poor shall be a point of departure for efforts to achieve equitable and sustainable development. The content of the policy is formulated with respect to eight central thematic areas and component elements:

1. respect for human rights;
2. democracy and good governance;
3. gender equality;
4. sustainable use of natural resources and protection of the environment;
5. economic growth;
6. social development and social security;
7. conflict management and human security;
8. global public goods.

Emphasis on poverty reduction in Swedish development cooperation is clear-cut and shall be present in all of Sida’s operations. Policies and methods shall contribute to the achievement of the overall goal of Swedish development cooperation: *To contribute to an environment supportive of poor people’s own efforts to improve their quality of life.*

The documents below provide the policy and methods framework for Sida:

1. “Perspectives on Poverty” and its complement, “Goal, Perspectives and Central Component Elements”
2. “Sida at Work”
3. Sida manuals: “Manual for the Preparation, Implementation and Follow-Up of Cooperation Strategies” and “Manual on Contribution Management”

These documents express Sida’s fundamental principles and values. They are supplemented by a variety of other documents, from agency-wide and generally applicable policies for the development cooperation process to thematic and specific sector policies, position papers and practical manuals, all aimed at guiding and supporting Sida officials in their daily work.

Sida and global goals for reducing poverty

A more comprehensive approach to development cooperation has emerged as a result of the lessons learned over the last 50 years. The international development community is putting together a coordinated and focused response, mustering the political will and establishing the frameworks and mechanisms for organizing a more effective assault on poverty.

It is an approach characterised by a set of key principles for effective development, and their embodiment in more programmatic approaches to delivering development assistance. The recently developed global development agenda falls back on long-standing international conventions. These are legally binding undertakings by the countries that have ratified them.

Sida recognizes that the global development agendas play a crucial part in reducing poverty and encouraging progress in the developing world. As a result, Sida has made these agendas the main focus of all of its work. Below, a short description of each is presented.

Millennium development goals

The Millennium Development Goals form one important element in the emerging consensus on development cooperation. The eight Millennium Development Goals (MDGs) were agreed at the United Nations Millennium Summit in September 2000 and nearly 190 countries have subsequently signed them. The goals include halving global poverty and hunger to protecting the environment, improving health and sanitation, and tackling illiteracy and discrimination against women. They were introduced as part of a wider attempt to encourage the international community to stop talking about making a difference in the developing world and start doing something about it by joining forces.

Alongside the goals, a series of 18 targets were also drawn up to give the international community a number of tangible improvements to aim for within a fixed period of time, and make it easier for them to measure their ongoing progress. The intention is to achieve nearly all of these targets by 2015.

For specific MDGs, targets and indicators specific to natural resources, see Annex 1.

In addition to the Millennium Declaration, a number of other international arrangements and commitments have been made. Combined, these commitments are frequently referred to as the Aid Effectiveness Agenda. These commitments now constitute an international agreement

on not only what is to be done in order to combat worldwide poverty and promote global development, but also how it should be done. Other international arrangements include:

- 2002 Johannesburg Summit;
- 2002 Monterey Consensus;
- 2003 Rome Forum of Harmonization;
- 2004 Marrakech Memorandum on Management for Development Results;
- 2005 Paris High Level Forum on Aid Effectiveness, resulting in the Paris Declaration.

Paris declaration on aid effectiveness

Providing more effective aid and increasing its impact on development is one important contribution to halving global poverty by 2015. With this belief, the “Paris Declaration on Aid Effectiveness: Ownership, Harmonization, Alignment, Results and Mutual Accountability”, was developed. Approximately 90 countries and 27 development institutions attending the high-level forum, held in Paris 28 February–2 March, 2005, adopted the Declaration.

The Declaration contains around 50 commitments to improve the quality of aid, which will be monitored by 12 quantitative indicators of progress. Targets, set for each of the indicators for 2010, involve action by donors and partner countries to help track and encourage progress in implementing the commitments.

Key principles for enhancing aid effectiveness are as follows:

- Partner countries own and exercise leadership over their development policies;
- Donors align their overall support on partner countries’ national development strategies;
- Donor actions are more harmonized, transparent and collectively effective;
- Resource management and decision making are more results-orientated;
- Donors and partners are accountable for development results.

OECD/DAC guidelines for poverty reduction

The Development Assistance Committee Informal Network on Poverty, in consultation with other international partners (the World Bank, the International Monetary Fund and the United Nations Development Program) has produced detailed guidelines on poverty reduction intended to help donors mainstream poverty reduction throughout agency operations, and turn policy into practice. The guidelines represent an emerging international consensus, and a shared commitment and understanding of how to work together more effectively to help developing country partners reduce poverty.

The guidelines outline a set of ten priorities for policy coherence, including increasing the power of developing countries in international forums, the need to address the role of twelve or so arms-exporting countries involved in a trade worth about USD 10 billion, and the need to implement the Marrakech Declaration on the differential treatment of food and agriculture for the least developed countries and net-food-importing developing countries.

OECD/ DAC promoting pro-poor growth in agriculture

This policy guidance for donors considers agriculture's changing landscape and identifies a new agriculture agenda for enabling pro-poor growth. It recognizes new challenges, such as HIV/AIDS, natural resource degradation, global competition, demographic change and migration, but also new opportunities through spatial and occupational diversity. Furthermore, it identifies the key priorities for action on the new agenda: enhancing sector productivity and market opportunities, promoting diversified livelihoods, and reducing risk and vulnerability. Against this background, donors will need to work effectively with their partners to promote sustainable, country-driven and programme-based development that recognises the importance of agriculture to pro-poor growth.

DAC guidelines on conflict, peace and development cooperation

The publication presents the full range of DAC guidance on conflict prevention in one volume. Part I, *Helping Prevent Violent Conflict: Orientations for External Partners* includes the 2001 ministerial statement and supplement. Part II, *Conflict, Peace and Development Co-operation on the Threshold of the 21st Century* comprises the first policy statement and guidelines.

The guidelines can be used to help donors in their work with countries involved in conflict and with their own government counterparts in other ministries. They can also lend support to the international community as they strive to coordinate aid and assistance and provide guidance to partners in governments, civil society organisations and businesses in developing countries.

European Union land policy guidelines

The EU member states, recognizing the importance of access to resources to economic, social and political stability, commissioned the policy and operational EU Land Policy Guidelines 2004, through the EU heads of rural development and a task force of member states and commission experts. The guidelines are intended for EU donors supporting interventions in rural land policy and administration, and are divided into two parts. Part I is the policy framework and Part II is the operational guidelines. Part I includes "What is Land Policy and Why Does it Matter?" This discusses links between land policy and other major policy areas (e.g. poverty reduction, gender equality, conflict, governance, environment); elements of a land policy programme. It also covers central issues for the design of land policy and land reforms (e.g. securing rights, titling, redistribution, key principles) and the implementation of land policies, including the role of different stakeholders. Part II includes a situational analysis, policy framework, opportunities for changes, sustainability, monitoring and evaluation. The EU policy guidelines focus mainly on rural land and its relationship to agricultural and rural development and economic growth. A key policy framework and key issues of urban land, forest land, water, wetlands/coastal resources, grassland, protected areas and wildlife, and genetic resources are not addressed. These issues will be addressed in this paper.

Key development actors in the natural resource tenure area

There has been considerable movement concerning land issues by official development agencies in recent years. Policies and approaches have evolved and there is now greater recognition among donors of the importance of addressing land and resource issues. Besides the European Union, the Food and Agriculture Organization (FAO) and the International Fund for Agricultural Development (IFAD), the donors most active include the United Nations Human Settlements Programme (UN-HABITAT), United States Agency for International Development and the World Bank. Other donors, such as the Canadian International Development Agency (CIDA), the United Kingdom Department for International Development (DFID), and the German Technical Cooperation (GTZ) are also active regarding these issues.

Natural resource tenure issues are on the donor agenda, not only because of the coexistence of the landless/resource poor and inefficient, large landholdings in dualistic systems, but also because of the enormous influence of prospects for sustainable management of natural resources. As resource tenure reform is extremely costly and complex in political, legal and production terms, donor support to natural resource tenure reform may be of importance. A growing recognition among donors is reflected in a number of recent multilateral and bilateral donor rural strategy documents that urge the donor community to do more and not avoid this fundamental issue simply because of its controversial nature.

3. Why resource tenure matters

This section examines the link of resource tenure rights on poverty reduction from the perspective of Sida's major development priorities.

Tenure rights to resources play a fundamental role in governing the patterns of natural resource management, as well as in the welfare of individuals and communities dependent on those resources. Any policy that shapes resource tenure rights potentially plays a major role in promoting or inhibiting economic growth, equity of resource distribution, empowerment of the resource user and sustainability of the resource base.

If we can understand existing natural resource tenure rights – how they are determined, and the role of policy in that determination – we can design successful policies to prevent further depletion of natural resources, enhance the resource base, and ensure sustainable resource utilisation, which can in turn improve household welfare.

Secure resource tenure for poverty reduction

Sida is increasingly recognising secure land and resource tenure as an essential catalytic force for poverty reduction, economic growth and sustainable development. The importance of secure access to productive resources is a reoccurring theme in a number of Sida policy and position papers. These papers recognise that natural resource tenure insecurity or unfavourable tenure conditions tend to strike at the foundation of the livelihood systems of the rural poor.

It is also recognised that secure resource tenure rights encourage investment, which can lead to higher productivity and efficiency. Tenure insecurity leading to loss of access can imply destitution, and discourage farmers from making investments to increase productivity and investments for the reorientation of farm production for the market (*Improving Income among Rural Poor – Strategic Guidelines, Sida 2004*).

Poverty and tenure insecurity is still mainly seen as a rural problem in Africa and Asia, although land conversion and the allocation of new functions to land is gaining importance in peri-urban areas, which puts new pressure on the urban poor. Increased tenure security is, again, an issue in the case of informal, and/or illegal land occupation of the poor at the urban fringe, who are either fleeing from deteriorated living or environmental conditions in rural areas, or are evicted from other rural, or even urban, sites. Tenure security is an issue when it comes to overcrowded living conditions (slums) and environmental hazards, the occur-

rence of which may arise from the density, the hazardous location of settlements and exposure to multiple pollutants.

In Sida's Urban Policy, it is stated that equal rights of access to housing require improved property rights and other forms of secure tenure, especially for the poor who are most at risk for forced eviction and other violations of human rights (*Fighting Poverty in an Urban World, Sida 2006*).

Resources are key assets for both the rural and urban poor; they not only provide a foundation for economic and social development, but also help empower people in a number of ways to help them adjust to the challenges posed by recent globalisation. By governments and donors giving due attention to the possible source of tenure insecurity and providing a basis for more effective resource utilisation, which could be critical for countries to take advantage of the resources at their disposal in the most effective way, growth and poverty reduction could be promoted.

Natural resource tenure and food security

Access to productive resources is a crucial factor in the eradication of food insecurity and rural poverty. Rural landlessness is often the best predictor of poverty and hunger. The poorest are usually landless or land poor. Inadequate rights of access to land, and insecure tenure of those rights, often result in entrenched poverty and are significant impediments to rural development and the assurance of food security. Improved access to land allows a family to increase household food consumption, thereby helping to ensure household food security. Improved access to land may enable the family to increase household income by producing a surplus for sale in the market and may improve the ability of a household to access credit. Secure access to natural resources often provides a valuable safety net as a source of shelter, food and income in times of hardship, and a family's land may be the last available resort in the case of disaster.

Natural assets associated with land include water, forests and natural pastures. Moreover, land rights often include collective rights held by social groups and rights of access to common property resources. Besides agricultural land, forests, rangelands, wetlands and wildlife resources are important sources of livelihood and food security.

Natural resource tenure and pro-poor growth

Reducing poverty calls for rapid and sustainable pro-poor growth. This requires good governance and prudent macro-economic management; competitive markets, a vibrant private sector, efficient institutions, sustainable use of natural resources and equitable access to resources and services. Making growth pro-poor requires equitable participation by poor men and women in generating and benefiting from that growth. It also requires reforms to reduce inequalities regarding human capabilities and in access to assets, basic services and productive resources, such as land, water, forests, training and credit.

In the policy guidelines, "*Sida's Support to Private Sector Development and Making Markets Work for the Poor*," it is stated that securing fair, non-discriminatory and effective property rights is one of the fundamental elements of private sector development.

Natural resource tenure and governance

Natural resource tenure is an issue of governance. The United Nations Development Programme's Strategy Note on Governance for Human Development states:

Governance is the system of values, policies and institutions by which a society manages its economic, political and social affairs, through interactions within and among the state, civil society and private sector. It is the way a society organizes itself to make and implement decisions to achieve mutual understanding, agreement and action. It comprises the mechanisms and processes for citizens and groups to articulate their interests, mediate their differences and exercise their legal rights and obligations. It is the rules, institutions and practices that set limits and provide incentives for individuals, organizations and firms. Governance, including its social, political and economic dimensions, operates at every level of human enterprise, be it the household, village, municipality, nation, region or globe.

The link between natural resource tenure and governance has been identified in several policy and position papers, and particularly so in the recent Sida publication “*Of Global Concern – Rural Livelihoods Dynamics and Natural Resources*”. This publication stresses the need to address natural resources from a governance perspective. One of the policy and research findings of the book is that rural and associated policies and development strategies must be understood in a broader structural and governance context.

The management and allocation of land and natural resources is a key governance issue for both rural and urban populations in a number of important ways. The recognition of land rights of the millions who dwell in informal settlements is critical to improving their living situations and promoting the rule of law. Where there are no effective, legitimate channels for land access, squatting and land invasions are the only options available for the poor and these become legitimate in their eyes. Similarly, the fact that basic services are denied to people living in informal settlements, which consequently can only be acquired illegally, undermines respect for the law and the whole state system, and exacerbates social exclusion.

Where land administration is complex or dysfunctional, rent-seeking behaviour flourishes at the expense of the poor. Land/natural resource institutions are a vital element of effective governance. Where they are weak, the rights of the poor are particularly at risk. Well-functioning property rights systems and land institutions underpin economic development and help reduce corruption and social conflict. Efficient land administration that is accessible to ordinary people and that recognizes the complexity of land rights on the ground is crucial. The legal recognition of informal land rights is a powerful tool for social inclusion. Land markets must help the poor gain access to land. Land-use planning needs to be democratic and transparent in order to render mediation effective between competing interests of land users. Resource tenure must be addressed in terms of not only good governance but also democratic governance. Democratic governance implies participation, accountability, equity, respect for human rights and the rule of law, freedom from discrimination, and economic and social policies responsive to people’s aspirations and aimed at eradicating poverty (Human Development Report on Democratic Governance, 2002). If a society is democratic, the interests considered in making policy choices are certain to be more diversified. Furthermore, in democratic societies where social groups have access to information and participation in political life, and exercise some degree of influence in the government’s policies, there are fewer chances of large landowners and other elites dominating policy choices. Governance and legal systems impact the resource ownership. Gender issues are linked to a country’s legal framework and inheritance laws. It

is possible to use legal reforms to address issues of importance for Natural Resource Tenure; for example, issues about the overall legal framework for natural resources, inheritance rights of women and specified training for judges. Conflicts involving land are very common in the formal legal system and in traditional conflict resolution mechanisms.

Natural resource tenure and corruption

There are several angles from which to analyse the impact of corruption on natural resource tenure. In this section, we elaborate on “corruption and governance” issues, and corruption and environmental degradation.

Corruption and governance

Corruption can take different forms. The German Development Cooperation (GTZ) publication, “Preventing Corruption in Resource Allocation” identifies some of the weak points where corruption can thrive within the land tenure system, both at the national level and local or implementation level.

At the policy development stage, political corruption often results in business elites getting certain issues placed on the agenda; for example, land reform activities that involve the distribution of privately-owned land or the opening up of “green” zones (protected zones) for development.

Legislation dealing with land tenure may be complicated – and perhaps deliberately so. Land registration can be a bureaucratic and time-consuming process and public officials may be able to take advantage of the legislative complexity in order to extort bribes.

Land reform legislation that includes governments selecting regions and beneficiaries for lucrative projects may imply economic effects that encourage political corruption, with politicians and private interests colluding for their mutual benefit. GTZ identifies some situations that arouse suspicion; for example, the exclusion of sections of the population from participating in such projects through high levels of compensation or protective legislation in the case of privatisation or nationalisation of public property.

Tax legislation and legislation governing natural resource management should be scrutinised for corruption-generating opportunities. It may be the case that taxes are only collected from those individuals who do not (or cannot) bribe tax officials. In some cases, natural resource protection laws are such that they cannot be complied with. Indeed, laws may be ambiguously worded and implementing bodies have a wide scope for identifying irregularities or claiming competences for themselves in order to demand the payment of bribes.

Attention should be paid to resettlement measures as arbitrariness in the allocation of formal land titles to those being resettled may open the way for generating illegal income through corruption.

The GTZ publication highlights the selection of sites for allocation as one particularly corruption-prone area. Massive and corrupt payments are sometimes made when new areas for development or urban expansion are designated. In several countries, such as China (e.g. greater Shanghai), India (Mumbai) or Egypt (Cairo), such activities may sometimes involve entire (regional) governments, with corruption going right to the top. An example from the Phnom Penh area in Cambodia illustrates this point: An urban expansion zone of 150 ha is designated. Middlemen buy land for USD 2 per m². Development and soil amelioration costs amount to USD 8 per m². The land is sold to the end user for USD 40 per m². A profit of USD 30 per m². multiplied by 150 ha

(1.500.000 m²) adds up to around USD 45 million. The beneficiaries are three “powerful people in government”.

Corruption and environmental degradation

Corruption is known to hinder economic development and fuel poverty. There is also important evidence to suggest that it contributes to environmental degradation. Corrupt forestry officials or law enforcement officers who are in the pockets of unscrupulous logging firms, will turn a blind eye to illegal forestry activities, threatening sustainable management of the forest’s biodiversity storehouse. Similarly, fisheries inspectors endanger the sustainability of fish stocks by accepting bribes from trawling companies intent on ignoring official quotas. More broadly, poor national-level governance may translate into sub-standard environmental policy formulation and implementation, where narrow interest groups determine the common ‘environmental good’. In extreme cases, high-level political corruption can facilitate the wholesale plundering of a country’s natural resource base.

Findings on corruption prevention, drawn from literature and discussions, indicate the following measures:

Active participation in Poverty Reduction Strategy processes may offer a scope for corruption prevention; through involvement in agenda setting, donor coordination of anti-corruption measures, participation in sector-wide approaches, support of civil society, and participation in joint monitoring and evaluation procedures.

Active participation in international processes for Forest Law Enforcement, Governance and Trade (FLEGT) and the support of partners in improving their legal frameworks and law enforcement contribute directly towards preventing corruption. Particularly important is the support of selected partner countries in negotiating Voluntary Partnership Agreements with the EU (FLEGT-VPA). These agreements aim to support partners in fighting illegal logging and preventing the import of illegally logged or traded timber to the EU. The key instrument is proof of legality, or what is known as the FLEGT licence.

Promoting transparency and social participation

When delivering advisory services to any major legal state project involving land allocation or allocation processes in other sectors, efforts should be made to ensure that they include the participation of civil society. When involving civil society groups in monitoring and watchdog tasks, their legitimacy is crucially important. Since resource allocation often involves very large areas of national importance, the economic and social impacts of a land reform measure or the creation of a new irrigation scheme can be considerable. In such cases, an independent national commission with a pluralist constitution should be employed for implementation monitoring.

Independent observers and peer review mechanisms play an especially important role when developing and promoting systems of transboundary cooperation in order to fight illegal logging and timber trade.

Supporting legal projects through policy advisory services

Advisory services for legal reform or reform of legislative procedures within the scope of resource allocation should particularly focus on the impact assessment of laws. This can help bring to light any element of

suspicion that political corruption may be taking place where particular interests are being favoured for no apparently good reason.

To help prevent corruption, legislative projects receiving advisory services should be explored to see where new opportunities for creaming off gains might arise or where existing ones are reinforced, and how these tendencies might be reduced or eliminated.

Laws with which the population cannot comply should, in principle, be raised at government negotiations, and not just in terms of technical-legal deficiencies, but also implications for latent or evident corruption.

It is important to support partner institutions in formulating clearly worded laws. This applies with respect to provisions that govern offences and the definition of competences and procedures.

Incorporating measures into the promotion of democratic decentralisation

The decentralisation of administrative tasks alone does not offer adequate protection against corruption. It is important to strengthen parliamentary monitoring in municipalities, and to complement parliamentary structures with broad citizen participation.

To date, just and fair forest management, including forest protection, has primarily been achieved where the people themselves have performed management tasks. The best protection against corruption is the creation of a joint management system, comprised of representatives of the municipality and legitimate representatives of the local population.

“One-stop shopping” principle as a means of simplifying administration

The principle of introducing legislation to make administrative procedures more complicated, and involve as many agencies as possible in a given administrative action, should be made a thing of the past through the introduction of the “one-stop shopping” principle (as introduced e.g. in Morocco for company licences). A structure of this kind means that, for any given approval or land title registration procedure, a single agency is appointed to deal with all of the administrative aspects. The effect this has on helping prevent corruption can be further reinforced by additional measures to strengthen internal control and external monitoring.

Informing the public of their rights

The population concerned is often not even aware of its basic rights, nor does it know how to obtain a legal hearing. The dissemination of basic information would be a first step toward improved monitoring of decision-makers by the population.

Good governance in forest management

GTZ recommends the systematic, participatory development of integrated National Forest Programmes (NFPs) on the basis of international agreements and frameworks (The Intergovernmental Panel on Forests and Intergovernmental Forum on Forests), supported by the establishment of forest partnership agreements involving all key actors, including civil society. In many NFPs, FLEGT measures play a key role. GTZ recommends developing a national FLEGT strategy within the NFP – which itself is based on a broad social consensus – to promote good governance in forest management and serve as an instrument to help prevent corruption.

GTZ recommends that a programme of this kind include the following aspects: involvement/participation of target groups, other stakeholders and civil society organisations as early on as possible; harmonisation

and simplification of the complex and contradictory regulatory frameworks for forest management of the various bodies; development of joint standards, coupled with the creation of all-embracing transparency. This will include, inter alia, the following: the clarification of ownership issues that takes into account pluralist forms of use and the creation of transparent conflict management mechanisms; investigation and sanctioning of misdemeanours in the forestry sector by independent bodies with extensive powers (increasing the risk of detection of corrupt individuals); FLEGT measures of financial and technical support to develop mechanisms for the legal and sustainable production and marketing of timbers and forest products in order to also encourage investors to put a stop to illegal practices that distort market prices.

Resource tenure and human rights

In countries where agriculture and renewable natural resources are the main sources of income, sustainable livelihoods will generally entail the security of land and natural resources rights.

Land and other natural resources are backed by different sources of public, international law, including international human rights law. Rights to natural resources can be examined through the lens of international human rights law in terms of the right to adequate housing, property, food, protection against forced evictions, non-deprivation of one's property, employment, an adequate standard of living, and the rights of indigenous and tribal peoples, women, pastoralists and other vulnerable groups. Non-discrimination is a central human rights principle, always to be respected (Article 26, International Covenant on Civil and Political Rights). The most important human rights in relation to natural resources are listed in Annex 2.

Integrating human rights concerns while addressing resource tenure rights allows taking into consideration other concerns than merely economic; i.e. religious, cultural, and political. It will also help to identify power relations within a given society, which are usually crucial to understand the social and political dynamics around natural resources. When integrating the rights perspective into Swedish development cooperation the principles of non-discrimination, participation, accountability, transparency are central.

Resource tenure and gender equality

In the Sida policy "*Promoting Gender Equality in Development Cooperation*" it is stated that in order to achieve economic empowerment of women Sida will highlight access to resources; i.e. land, credit, financial resources, facilities and information when promoting balanced power relations and gender equality.

Strengthening access to land for women is critical as they are major contributors to the local food supply and family nutrition in most countries. Yet, they frequently lack secure access to the land where food is produced, often lose access to their husband's land at the time of his death, rarely have the same rights to inherit land as men, and are forgotten when land is distributed through land reform.

In order for women farmers to realize their full potential as producers, access to land must be accompanied by access to rural extension, credit, production inputs, technology and human capital development.

In Sida's position paper, "*Improving Income among Rural Poor*," gender concerns of particular strategic importance related to market integration and development are for women to have secure access to and control

over productive resources and services and be part of decision-making processes at various levels. Important is that this includes secure land tenure, property and inheritance rights (formal titling and registration), access to loans and credit, the right to sign and enter into legally binding agreements in their own right, and access to services, capacity development and training.

Women's right to resources is a critical factor in social status, economic well-being and empowerment. Resource tenure policy reform should be considered as an essential means of overcoming gender inequality. Resource tenure policy should ensure women full and equal access to, and control over land, including the right to inherit and own land and other productive resources.

Women occupy a central role in food production and food security, producing 50 to 90 percent of domestic food crops in Asia and 80 to 90 percent in many Sub-Saharan Africa countries.

According to United Nations Development Fund, estimates in some countries show that the percentage of landowners who are women is in the single digits, even although women may do three-quarters or more of the agricultural work. The UN Commission on the Status of Women reported in 1984 that "while women represent half of the global population and one-third of the labour force, they receive only one-tenth of world income and own less than one percent of world. The proportion of women heading rural households in Sub-Saharan Africa is growing. The migration of men from agriculture, health pandemics such as HIV/AIDS, and other factors have resulted in women assuming an increasingly dominant role in agriculture in the developing world.

A number of initiatives have been undertaken to strengthen resource rights for women through the revision of constitutions and land laws to provide equal property rights for men and women. These legal provisions do not necessarily translate into de facto changes in customary land practices or local bureaucratic decision making and women continue to be denied access to resources through legal, bureaucratic and customary inheritance practices in many countries. Implementing equality of opportunity may well require affirmative action until discriminatory social norms and practices against women are eradicated.

The UN Economic and Social Council Commission on the Status of Women states that "land rights discrimination is a violation of human rights" and urges states "to design and revise laws to ensure that women are accorded full and equal rights to own land and other property..."(42 Session, 2–13 March 1998, Agenda, Item 3). Similarly, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) states in Article 14 that "State Parties shall take all appropriate measures to eliminate discrimination against women in rural areas... ensuring such women the right...to have access to...and equal treatment in land and agrarian reform..."

Resource tenure and HIV/AIDS

The impact of HIV/AIDS on land rights vary considerably according to tenure systems, patterns of inheritance and land market activities.

The disease directly impacts farm labour, undermining people's capacity to use land in a productive and sustainable manner. It indirectly impacts the land rights of widows and orphans, since land rights registered in the husband's name, tend to be lost at the time of his death, or are passed down to other males. The disease constrains the already limited options of women to access land securely and can disinherit the following generation.

Ownership and control over economic assets, such as housing and land, can protect women affected by HIV/AIDS from destitution. Furthermore, securing property and inheritance rights for women and girls has a clear value in HIV prevention. In many farming communities, women are not entitled to land in the same way as men. A well-documented effect of the AIDS epidemic is the drastically impaired living conditions of surviving widows and their children. Improving women's access to land and ownership of land helps women to better withstand financial crises, care for their children, prevent domestic violence and avoid HIV.

Mobile livelihoods and insecure land rights amongst migrant workers, urban squatters and pastoralists can, in turn, affect the dynamics of HIV/AIDS, and insecure tenure may prevent people from participating in disease-mitigation programmes. The prevalence of HIV/AIDS in informal settlements in African countries is normally twice that of the country's average. Research looking at the causes of the high infection and mortality rates in these areas is ongoing. Insecurity, density and unsanitary conditions are some of the causes making people more vulnerable to the disease.

Traditional knowledge and indigenous peoples

Traditional knowledge refers to the knowledge, innovations and practices of indigenous and local communities around the world. Traditional knowledge, developed from experience gained over millennia and adapted to the local culture and environment, is transmitted orally from generation to generation and through watching elders and actively learning from them.

When dealing with tenure issues, traditional knowledge is fundamental in at least two ways. A large part of local traditional knowledge deals with customary law and tenure issues, and traditional knowledge itself is also a focus for intense international dialogue and negotiations in respect of who has the rights to it. The role of traditional knowledge, along with its preservation, protection and equitable use, has recently received increasing attention in a range of international policy discussions. Today, the rights perspective of traditional knowledge is being discussed and negotiated in several arenas: technical working groups of the Convention of Biological Diversity (CBD), the World Intellectual Property Organisation's Intergovernmental Committee on Genetic Resources, Traditional Knowledge and Folklore (IGC), the UN Permanent Forum on Indigenous Issues and in the approval process of the United Nations Declaration on the Rights of Indigenous Peoples.

The international community has recognized the close and traditional dependence of many indigenous and local communities on the lands, territories and resources they have traditionally owned or used. The World Bank writes in its operational guidelines about indigenous peoples:

“The Bank recognizes that the identities and cultures of indigenous peoples are inextricably linked to the lands on which they live and the natural resources on which they depend... Indigenous peoples are frequently among the most marginalized and vulnerable segments of the population. As a result, their economic, social, and legal status often limits their capacity to defend their interests in, and rights to lands, territories, and other productive resources, and/or restricts their ability to participate in and benefit from development. At the same time, the Bank recognizes that indigenous peoples play a vital role in sustainable development and that their rights are increasingly being addressed under both domestic and international law.”

The UN Declaration on the rights of indigenous peoples states in article 26¹:

“Indigenous peoples have the right to the lands, territories and resources, which they have traditionally owned, occupied or otherwise used or acquired.

Indigenous peoples have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.

States shall give legal recognition and protection to these lands, territories and resources. Such recognition shall be conducted with due respect to the customs, traditions and land tenure systems of the indigenous peoples concerned.”

The Conference of the Parties to the Convention on Biological Diversity has adopted the Akwé Kon guidelines, which are guidelines for the conduct of a cultural, environmental and social impact assessment regarding developments proposed to take place on, or which are likely to impact, sacred sites, lands and waters traditionally occupied or used by indigenous and local communities. The guidelines, named after a Mo-hawk term meaning “everything in creation,” provide a collaborative framework with the aim to ensure the full involvement of indigenous and local communities in the assessment of the cultural, environmental and social impact of proposed developments on sacred sites, lands and waters traditionally occupied by them.

It is vital that customary law, traditional knowledge and indigenous rights are taken into account, respected and upheld in all forms of work with tenure and tenure-related issues.

Natural resource tenure and environment

Natural resource tenure and environmental conditions are closely related. Tenure systems can promote resource use that harms the environment or it can serve to enhance the environment. Unsuitable rules (either formal or informal) for acquiring access to land and other natural resources can lead to environmental degradation. Environmental aspects are an integral part of Swedish development cooperation. Sida works actively for sustainable development in a large number of countries and operational areas. In this respect, the most important point of departure is that a permanent reduction in poverty is not possible unless consideration is given to the natural resources and environment that people depend on for their livelihoods, health and survival. The importance of this was further confirmed by the Swedish Parliament when it approved “Shared responsibility: Sweden’s Policy for Global Development,” which aims for equitable and sustainable global development. Programmes of international development cooperation are implemented within the framework of this overriding goal. The goal is for international development cooperation to make it possible for the poor to improve their living conditions. In “*Perspectives on Poverty*,” Sida expanded its views on poverty reduction, which included an environmental dimension:

“Poverty reduction is impossible in the long term unless consideration is given to the natural resources and the environment that people depend on for their health, livelihoods and survival.”

Land, together with water and genetic resources, are natural resources that most directly impact human livelihoods. Land conversion (e.g. clearing of natural forest land for agriculture) is a major factor behind environmental degradation and the loss of biodiversity, and is often

¹ This declaration is not adopted by the UN General Assembly. It is only adopted by the Human Rights Council.

linked to and/or aggravated by unclear tenure arrangements. In many parts of the world, clearing land has become an effective way to lay claim to it. For example, local people who had customary rights to those resources have traditionally used forests for shifting cultivation. The ability of people who are not members of local communities to acquire land by cutting down trees has resulted in the clearing of land on an extensive scale, leading to, for example, fires and smoke that blanketed parts of Asia and South America in recent years.

Inappropriate tenure arrangements on state lands can also lead to environmental degradation. In the case of arid or semi-arid grazing systems, some rangelands regarded officially as state property have been converted from traditional pastoralist production to commercial ranching or cultivation. Such policies have failed to recognize that the variability of rainfall requires pastoralists to have access to extensive rangelands. Removal of some of the lands for commercial ranching restricts the mobility of pastoralists. As a result, there is an over-concentration of pastoral livestock in those rangeland areas that are still accessible to the pastoralists. A similar example is the conversion of forest land to large-scale oil palm plantations in south-east Asia, which has resulted in the loss of biodiversity and livelihood opportunities of forest-living peoples. An emerging issue related to most types of land concerns biofuel plantations (see Box 1).

Box 1. Biofuels: Large-scale land conversion coming up

With oil prices at an all-time high, few alternative fuels for transport, and with hopes for more “climate-neutral” fuel production, the European Union, United States, and developing countries such as Brazil, China, India, Indonesia, and Malaysia have embarked on aggressive state-supported programs to produce liquid biofuels: ethanol and biodiesel. Sugarcane and maize are the main feedstock sources for ethanol production, and oil from rapeseed, soybean, and palm and, in drier areas, jatropha for biodiesel production.

Biofuel production will be an increasingly important factor behind large-scale land conversion and will further enhance competition for land and water resources. Most types of land will be affected – agricultural land, forests and rangelands.

Biofuel production may constitute new market and income opportunities, but there is a risk of high environmental and social costs, particularly so where tenure rights are unclear. There are already examples of governmental agreements with companies that allow large-scale plantations of “energy crops” where land titles/rights of the poor are overrun and local livelihoods hence jeopardized.

Environmental aspects are also closely related to resource tenure security. Secure resource tenure is a necessary condition for ensuring sustainable natural resource use and protecting biodiversity. This security encourages investment of labour and capital in the land, and in the natural resource base. Investment leads to better returns from land and natural resources, and intensification of their use.

Soil degradation and growing water scarcity is threatening long-term food productivity. Soil degradation alone reduces yields significantly on 16 percent of agricultural land globally. It is especially severe in Central America, where 75 percent of crop land is seriously degraded, and in Africa, where 20 percent of the total land area, especially pasture, is at risk.

Some calculations indicate that 500 million people live on severely degraded hillsides, 200 million farms on fragile tropical rain forest soils and 850 million live in dry areas threatened by desertification.

Lack of clear rights can reduce the incentive to implement long-term resource measures. In the case of privately-held land, for example, tenant farmers with short-term leases may not undertake soil protection measures, plant trees, or improve pastures if they do not hold the land long enough to receive the benefits of their investments.

Natural resource tenure conflicts

There typically is a close link between resource tenure and conflict over resources. Competing claims for control and use of resources (land, water, fisheries, forests) may provoke conflicts. Population growth and changing economic factors may, in turn, increase competition for access to resources. Clearly defined resource tenure rights are also presumed to reduce conflict over resources during scarcity.

There is a general recognition by Sida that resource tenure-related conflicts are an increasing challenge. It generates both social and economic costs, which create obstacles to poverty reduction. It also risks widening into broader violent conflict that may have serious political consequences.

Sida's policy "*Promoting Peace and Security*" sets out the direction for its work to promote peace and security. Sida's approach is to make all development cooperation conflict sensitive; i.e. ensure that interventions do not have negative effects on conflict dynamics.

The policy identifies three main types of activities to promote peace and security, namely; promote dialogue, security and structural stability; i.e. activities that consciously target structural or root causes of violent conflict and insecurity. Among the examples of promoting structural stability, the policy includes initiatives that promote the sustainable use and control of natural resources to prevent conflict over resources, such as cooperation on the common use of scarce resources or on land distribution and usage, and the control of primary commodities, such as diamonds and timber, so as to limit access to resources that would finance violent conflict.

Sida has developed a conflict analysis methodology to provide a better basis for assessing the potential of conflict-sensitive intervention and to support peace and security.

The question of access to and control of resources informs a number of conflicts in several regions. In many recent and ongoing conflicts, valuable or scarce resources – such as land, water, timber, or minerals – have played a central role, both in causing and sustaining violence. For example, illegal logging and "conflict timber" became a prominent feature of Liberia's civil war. Covering 39 million square kilometres, or roughly 30 percent of the globe's land area, the world's forests are among its most important natural resources. However, forests are disappearing at an alarming rate. The World Resources Institute reports that 46 percent of the world's old-growth forests have been destroyed. Competition for these resources can trigger, exacerbate and finance numerous crises and conflicts in developing countries.

Because water is an essential non-substitutable resource, conflicts may easily arise if this resource is being, or perceived as being, depleted or degraded by other actors at a cost to oneself. The possibility of international, regional and local level conflicts regarding accesses to, and use of freshwater, therefore, poses a serious threat to both human security and

state security, especially in those regions of the globe that are already severely affected by water scarcity. This includes parts of Africa, the Middle East, central Asia and the Indian sub-continent. Today, water security is an essential component of national security in most countries.

The need for further integration of areas such as water, development and conflict prevention has been a focus area for the Swedish Government in the past few years, clearly expressed in the Swedish Global Development Policy.

Studies to understand how the question of benefit sharing could be implemented in practice are underway within the Swedish Government offices. A study called “Trans-boundary Water Cooperation as a Tool for Conflict Prevention and Broader Benefit-Sharing” has been newly launched by the Expert Group on Development Issues (EGDI), an in-house Foreign Ministry think tank on development issues.

The end of an armed conflict, especially in the case of a prolonged civil war, creates a situation whereby a significant proportion of the affected population will claim or re-claim access to land and land-based resources. In these countries, violent conflict is usually accompanied by changes in land distribution and transformations in property rights. In addition, access to land is a major issue with respect to the return of refugees. It is important, therefore, to understand ownership, use and access to land and to incorporate sufficient analysis of the local land tenure situation. This also applies to the demobilization and reintegration of former combatants. Post-war re-establishment of ownership, use and access rights is often complicated and problematic, but if land and property issues are left unattended, they may provide a significant risk for renewed confrontation.

It is important to note here that although the question of resource scarcity is often cited as a key cause of a number of conflicts, the reality, however, is that resource-based conflicts cannot be explained away so easily. Scarcity may not only lead to violent conflict; it may also be a catalyst for peace. Not only that, it has also been argued that an abundance of resources – the opposite of scarcity – also generates conflicts. Scarcity usually refers to natural resources that people need for their direct livelihoods (e.g. fresh water or fuel wood) while the abundance debate focuses on luxury goods sold on the global market (e.g. diamonds or gold). Even with regard to one specific resource, scarcity and abundance may occur simultaneously. A resource may be scarce in some segments of society and abundant in others.

Resource-based conflicts are therefore the function of complex and multifaceted dynamics. These range from the inadequacies and failures of municipal and national policies and legislative frameworks, to globalization and its impact on local circumstances. Rather than scarcity in itself, it is the way scarcity is dealt with that may be the cause of conflict.

It is, important to stress that, insofar there is a conflict, and in exploring the conflict process, it is useful to ask questions that unravel the security of resource tenure and its contribution to the generation of the conflict.

4. Key concepts and terminology

What is natural resource tenure?

A person or community's rights to land and other natural resources define their natural resource tenure. Resource tenure is defined as all the ways by which people gain legitimate access to natural resources for the purpose of management, extraction, use and disposal. Legally, tenure is a bundle of both rights and obligations – the rights to own, hold, manage, transfer, or exploit resources and land, but also the obligation not to use these in a way that harms others (Bruce 1998a: 1; FAO 2002: 10). In other words, tenure defines property and what a person or group can do with it: their property rights. In this paper, “tenure rights” of natural resources are therefore broadly understood as synonymous with “property rights.” Ownership is not the only, or even most common, type of tenure right. Property rights are an integral element in the management and use of resources. They define who has an interest in a resource and the extent of that interest. They are defined by custom, convention and law and affect the behaviour of people managing and using a resource.

Resource tenure is complex and multidimensional. There are typically many state laws and policies, implemented by multiple state agencies, which are relevant to resource tenure. For example, the jurisdictions of departments or ministries of land, forestry, fisheries, and civil administration in terms of resource tenure often overlap. Municipalities or city councils are also involved. Local, informal practices are even more complex as they involve the accumulation of ways of doing things over many years. An understanding of the informal as well as formal dimensions of resource tenure is, therefore, a crucial starting point for any donor interventions.

Major categories of resource tenure

Generally, four major categories of resource tenure are identified. These categories are defined on the basis of those who exclusively exercise rights to the resource:

public/state property – rights held by the state and in which the public sector exercises rights over the resources;

private property – rights held by an individual or legal individuals like corporations;

common property – rights held jointly by a group of people;

open access – no specific rights are exercised by anybody; a vacuum situation.

In discussions about tenure, there is often confusion between an “open access system” and a “common property system”. The term “open access” (OA) describes a system where no property rights exist, or rather, where property rights for different reasons cannot be enforced. This happens, for example, when traditional rights to land are abandoned, the state claims ownership of land, but cannot enforce its rights to the land. This results in a “vacuum” where nobody (neither the state nor the local resource users) has the power or the legitimacy to enforce rules of use. If the resource in question is under pressure; i.e. production is lower than potential demand, then OA will result in depletion of the resource as no one has defined rights (but anyone can use the resource without restrictions). There are no specific rights assigned to anyone and no one can be excluded from using the resources.

Common property (CP), in contrast, is the term used for the situation where a resource is owned by a group of people. This is often the case with forests, grazing land, water and fisheries. Common Property Resources Management (CPRM) systems often emerged in traditional systems. The characteristics of a functioning CPRM system are often as follows: the group is homogenous; the resource has a defined boundary; resource appropriation is relative to provision; there is sufficient consensus in the group on how to use the resource; the group feels that it can influence rules of use; a sanction system is in place; there is a transparent and accountable conflict resolution system, with monitoring possible; and last but not least, the group has the power to exclude other users. Although many of the traditional CPRM systems are still functioning, many are deteriorating. According to some observers, the deterioration in many third world countries is due to a growing insecurity about what rules to abide to when the state tries to modernize the land tenure system. The traditional system and the modern system exist side-by-side and the groups in society who will profit from adhering to the new system will do so while ignoring the traditional systems.

Although these four major categories of tenure can be distinguished in theory, they often overlap in practice and change over time. At the same time, the notion of “resource” is also not as simple as it might seem. A single item (a tree, field, stream) can be many different resources all at once. In the same way, the notion of “right” is not straight forward either. Different people have different types of access to these different resources in different ways at different times of the year. For example, all members of a community may be allowed to bathe in a river or collect drinking water, but only certain farmers may be allowed to draw water for irrigating fields and decide how to distribute that water in the dry season, while the state may claim ultimate “ownership” of the water, including the right to reassign it to others. Even on land declared as state forest land, individuals from a community may have the right to collect medicinal plants or fallen branches for firewood (use), local groups may have the right to plant trees (management) and guard them (exclusion), but the state may retain the right to approve any felling of trees and collect revenue from users. In an urban setting, the state might have leased a plot of land to an individual, who, in turn, makes an illegal subdivision and rents it to several people. In turn, these people have tenants who, for example, have access to a bed for the night but are not allowed in during

the day, or have access to the veranda during the day for selling commodities, but sleep elsewhere at night.

Much of the literature on property rights points towards state-enacted and enforced laws, designating who owns what. But the existence of laws that define property-rights relations is not sufficient. In many cases, the state does not have enough resources to enforce formal property rights, and informal rights may exist without – indeed, often conflicting with – formal state recognition.

A variety of tenure forms are found in rural and urban areas, ranging from squatting on invaded land to various forms of informal or formal tenure.

Schlager and Ostrom (1992) propose a useful classification of these bundles of rights in a hierarchy, ranging from limited, short-term rights to extensive, long-term rights to the benefit stream, as follows:

Access: the rights to enter a defined physical property. This might apply to recreational water use (such as swimming), where the main “use” is simply to be in the water, but would generally apply only to non-consumptive, in-stream uses;

Withdrawal: the rights to obtain the benefits from that property by taking out some of the flow. In water resources, in-stream uses versus withdrawal right represent an important distinction;

Exclusion: the rights to determine who will (and will not) have access to the resource;

Management: the rights to regulate use patterns, thus transforming the resource and potentially altering the stream of benefits from that resource. Management rights also provide the ability to define access or withdrawal rights;

Alienation: the rights to sell, lease, or bequest rights to the resource.

Access and withdrawal are considered use rights, while exclusion, management, and alienation are rights of control over the resource. “Ownership” is often conceived of as holding the full bundle of rights. With this hierarchy as a guide, it is proposed that making queries about which types of users are able to claim which types of rights, and what type of legal framework are those rights (or claims) based upon, is easier.

5. Tenure issues for different resources

In the debate regarding natural resource tenure, land tenure is the usual focus of public interest and is often linked to agriculture. However, distinct tenure arrangements apply as well to urban land, water and biological resources. Below some policy frameworks and key issues of each of these resources will be explored. The resources have been grouped according to agricultural land, urban land, water, rangelands, forest land, wetlands and coastal resources, protected areas and wildlife, genetic resources and petroleum and minerals.

Land for agricultural production in rural areas

Today, 900 million poor people live in rural areas in the world. Rural poverty is as diverse as the rural poor are in their livelihood strategies. Three-quarters of the world's poorest – 1.2 billion who live on less than one dollar a day – live in rural areas. Their livelihoods mostly depend on agriculture in one way or another. The poor are limited in assets: land, labour, capital and skills. If economic growth is to benefit them, the returns on the few assets they do hold must be increased.

Agriculture employs nearly one-half of the labour force in developing countries. Indeed, a large share of rural communities – especially the rural poor – is directly or indirectly dependent on agriculture, whether through farming, food processing, fishing, forestry or trade. Various figures and studies suggest that the world's poorest people are farmers. The World Bank's Development Report (2000-2001) estimates that 70 percent of those living on less than USD 1 per day are farmers.

Secure land rights and control over its produce are one of the most critical bases for the rural poor dependent on farming for their livelihoods. Besides production advantages, secure land rights can improve sustainable land management as well as access to credit, and, in times of crisis, serve as a source of security. Agriculture plays three fundamental roles in the eradication of poverty:

1. through contributing to economic growth and the “quality” of that growth in terms of its benefits to the poor;
2. as a livelihood strategy for hundreds of millions of the world's poorest people;
3. through the sustainable management of natural resources.

The shape and direction of agricultural development therefore affects the poor's income, the returns from different types of farming activity, the value of land and the demands for access to land resources.

Agricultural land tenure rights

Land tenure rights regulate the legal relationship between people – whether as individuals or groups – and land. Land tenure rights have played a fundamental and important role throughout history in the socioeconomic development of states and nations, and will continue to play a role. In many societies, both social status and power depended on the size and structure of landholdings. This continues to be the case today.

What form land tenure rights should take and how those rights are, or should be, allocated, therefore, raises questions that are fundamentally political in nature. The answers to these questions – in the shape, form, content and allocation of land tenure rights, land tenure regimes and reforms to such regimes – are themselves symptomatic of what are ultimately ideological expressions of the relationship between humans and land.

From a legal perspective, rights over land are far easier to conceptualize, establish and administer because of land's fixed physical nature; it is easier to define the boundaries of the resource unit than, for example, the rights over water and fishery resources, which are inherently mobile and transitory.

In many developing countries, especially in Latin America, southern Africa and some parts of Asia, rural land ownership is highly inequitable. Agricultural workers on big commercial estates are amongst the poorest and most vulnerable groups. Moreover, inequitable land ownership in many regions is deeply entrenched politically and culturally; consequently, it cannot be changed easily or rapidly.

In Sub-Saharan Africa, land reform is central to rural poverty reduction, but it is insufficient unless it is accompanied by a wider agrarian change and participation of the poor in broad-based agricultural growth.

Past and present land tenure reforms

– donor engagement in land tenure reforms

Land tenure reform refers to deliberate changes to the distribution of land resources or the forms of tenure under which they are held.

Reasons for launching land reform tend to accumulate over time and build up into a commitment to overhaul the whole, rather than to amend it in piecemeal fashion. Immediate motivations vary widely; from frustration with shortfalls in the colonial-derived property laws and a desire to free up the market in land, to accelerating entitlement programmes or redressing land losses, caused by racially discriminatory laws.

Donor engagement in land reform and land policy has changed over time. There have often been shifts in the approaches to land policy and administration by both developing country governments and donor organizations. Past land policies are important because they often continue to affect the conditions of the poor's access to, and use of land today. In order to understand how policy making with respect to land tenure has taken place, it is useful to look at the milestones of this process.

During the colonial period in Africa, the western legal view emerged in land policy making in the former African colonies from their beginnings. European concepts of proprietary ownership were thus transposed into African colonies. In the British colonies of south and south-east Asia,

policy focused on the creation of free holding landlords with rent-paying tenants.

Following World War II, state control of land and consolidation into large state farms spread across a number of countries in Asia and Africa. State-led land redistributive policies were high on the political agenda in the 1950s (in Asia and the Near East) and 1960s (in Latin America), especially in countries with high land property concentration, great social and economic inequality, abject rural poverty and widespread landlessness. Land reforms were largely political and aimed at mitigating rural riots and protests in order to keep the ruling government in power.

Land reform in Asia was driven by the desire of the Allies to weaken traditional elites and reduce the appeal of communism. At the same time, American-sponsored land reform in Latin America was also driven by ideological goals. The lack of political will to advance land reform, combined with the gradual disintegration of communism globally, led to disinterest on the part of governments in this often politically charged activity.

In the 1960s, donor aid to developing countries increasingly took the form of large infrastructural packages and support for both industrialization and modernized agricultural development schemes, with the expectation that benefits would 'trickle-down' to the rural and urban poor.

In the 1970s, agricultural development was primarily associated with the technology of the Green Revolution, with a central role given to international institutions and the state.

The late 1980s and 1990s saw countries around the world devote greater attention to neo-liberal reforms and structural adjustment that included opening markets, reducing or eliminating subsidies, privatizing state-run enterprises and allowing national currencies to float. As part of this process, countries determined that property rights can have a great impact on the development process. In some countries in Asia, there were policies to eliminate restrictions on the accumulation of land. In Africa, there were recommendations that communal forms of landholding be replaced with private property.

In Latin America, countries retreated from their modest agrarian reforms by granting negotiable titles to individuals. They also devoted considerable attention to titling former national lands and granting indigenous groups title to lands.

This is the thinking behind the long-standing promotion by the World Bank (and many donor organizations) of individualized land registration and titling (IRT) programmes, as both the World Bank and governments in developing countries have pushed land policy and administration along this evolutionary path.

The World Bank, for example, advocated land market promotion and land redistribution as well as formal land titling to owner-operated family farms and the individualization of holdings and abandonment of 'communal' tenure.

The Bank's policy position has always hinged on the basic assumption that secure property rights are both necessary and critical to economic growth, which in practice means formal legal (and normally individual) rights to own (or long-term occupancy), use and transfer land. The concept behind the approach is about "rural land" and agricultural development.

During the 1980s, the World Bank's structural adjustment programmes and liberalization policies (and the International Monetary Fund's stabilization policies) linked beliefs about the importance for

economic growth of privatizing and individualizing land rights with the broad pro-market tenets of 'neo-liberalism'. This shift was also reflected in its 1993 housing policy paper, which was heavily influenced by Hernando de Soto's work on urban informal settlements in Peru. Urban land tenure had "received scant attention as a subject in its own right until the 1980s" but by the early 1990s, de Soto's ideas were making a major impact upon the thinking about "urban land".

Despite the increasing dominance of market principles during the 1980s and 1990s, land was a key issue that remained on the political agenda. In Sub-Saharan Africa, user rights may have been privatized, but many states continued to retain radical title (ultimate ownership) and control of land use and administration. This has been central to the maintenance of their political and economic interests. In south and south-east Asia, long-standing state control of land use through land classification remained similarly strong, sometimes justified on the grounds of land's environmental functions, although this has been contested through squatting and illegal resource extraction, with a growing recognition by regional governments that they can not control such boundary incursions.

The 1980s and 1990s also saw the emergence of much critical research-based evidence on the effects of past land policies for the poor.

The experiences of individualized land registration and titling programmes in Sub-Saharan Africa have been much more unequivocally criticized, on both social and economic grounds, with the evidence increasingly challenging the underlying Western legal assumptions about land.

In the early 1990s, the World Bank itself funded and undertook several empirical studies on the link between freehold tenure and agricultural productivity, which also found that titling made no difference to levels of agricultural investment and productivity.

The Bank now downplays land redistribution and acknowledges that its past focus on mass titling programmes was "inappropriate," as was its past focus on land sale markets; instead, the report addresses land rental markets in some detail. In particular, the World Bank suggests that, under some circumstances, government-directed, one-time land redistribution could be substituted by non-coercive mechanisms of adjustment in access to land. Reference is made to market-assisted, market-driven, market-friendly or negotiated land reforms to indicate strategies intended to facilitate land market transfers.

Furthermore, the Bank acknowledges the importance of social legitimacy to the effectiveness of land policy and administration. As a result, it now firmly favours decentralization of land administration systems and a much greater role for local ('customary') land tenure practices and laws. In contrast, however, the accumulating evidence from urban areas had a somewhat more limited effect on the World Bank's 2000 urban strategy paper,

Overview of the debate on land tenure

Debates about land tenure have been subject to a number of variations of intellectual currents for decades and positions have followed different lines of thinking. Some proponents have argued for strong pro-market systems while others advocated for state-managed collectivism. Still others argued for systems based on ideas of social equality. Over the past years, the land tenure debate has focused on:

- the comparative advantages of formal and informal tenure systems, and how to integrate these systems better;

- assessing the economic efficiency of small vs. large landholdings (including the balance between economies of scale through mechanization, and diseconomies of scale through supervision and monitoring costs);
- the effects of different tenure systems on natural resource management in rural areas;
- defining the preconditions for effective management of common resources and seeking options for joint public/private management;
- the continuing marginalization of various groups – in particular women, indigenous peoples and the poor – due to lack of access to land;
- the pros and cons of market-based vs. non-market-based mechanisms for land reform.

In all these debates, there is ample evidence to support either one or the other approach. Because of the great variation in policy contexts and the socio-economic and cultural conditions, the relative merits/demerits of one form compared to another depend on the social, economic, political and cultural environment. For example, the debate about farm size and productivity has led to two models of agricultural development competing in the policy idea market.

For some, small farms are more productive than large ones. They produce more food per unit of area, contributing to national food security and generating more employment in the process. Furthermore, smallholders buy locally and sell locally, helping create dynamic and sustainable local economies. Others refute such arguments and note that the era of the smallholder farmer is over, and that for reasons of efficiency, small farms should be consolidated into fewer large holdings, allowing for economies of scale and increased mechanization. On the one hand, they point to impoverished peasant farmers on the margins of existence with little ability to generate a surplus for investment in the farm enterprise and limited capacity to adopt new technology. On the other hand, they point to profitable large farms, accessing world markets, and providing employment and good wages to the local rural workforce. Both sides present ample evidence to support either case. But because of the great variation in farm types, any statements on the relative merits of small versus large farms can only be relevant within specific social, economic and biophysical environments.

With the right kind of policy environment and availability of the appropriate services and infrastructure, small-scale farming systems can at least be as productive per hectare as large commercial farms, and also provide a decent living standard through assured access to local and global markets. This will depend both on national and international policies. A range of national and international factors combine to impede the poor from exercising their rights. Too often, discrimination in laws, regulations and customs excludes the poorest from markets, financial services, land and technical information. Public services are often ineffective and there are insufficient incentives for the private sector to service the needs of the poor.

The rules for international trade in agricultural produce remain largely inimical to the interests of developing countries. Subsidies provided to producers by wealthy countries result in overproduction and depression of world prices. Along with other trade barriers, this clearly limits opportunities in developing countries.

The crucial challenge is to ensure that agricultural growth takes place and small-scale farmers have their property rights secured and protected. Land titling is not always the best way of increasing tenure security, nor does it automatically lead to greater investment and productivity. In many places, land is held through unwritten, customary means, but it is not subject to insecurity. Formal credit may not be available and much investment in land on small family farms is based on labour effort rather than capital. If a policy aims to support small-scale family farmers, it must provide them with secure tenure. This can be done either by protecting legitimate customary rights or by providing land titles.

Urban land

Almost three billion people live in urban areas across the world – equivalent to roughly half of the world's total population. The growth and importance of cities in developing countries poses a major challenge for urban and peri-urban land management. Millions of people in developing countries live without adequate security of tenure or property rights. The United Nations expects this group to increase. The problem is particularly acute where the costs of access to legal land and housing are high and rising faster than incomes. In Africa, it is estimated that 70 percent of the urban population live in slums. Squatter populations in big cities are highly vulnerable to dispossession. The consequences of these evictions are severe: property is destroyed, assets are lost, social networks are broken, and access to essential services is lost.

Goal 7, Target 11 of the MDGs commits world leaders to achieve a “significant improvement in the lives of at least 100 million slum dwellers by 2020.” But UN-HABITAT considers this far too modest. It covers only a fraction – just 10 percent – of the world's slum dwellers. Since the target's inception in 2000, the global slum population has already grown by 200 million people. If current trends continue, the number of slum dwellers will have reached 1.6 billion by the 2020 target deadline. Furthermore, individual countries have no way of determining their share of the 100 million people involved. This dictates a much broader and more ambitious approach to achieve the “Cities without Slums” target of the Millennium Declaration adopted by world leaders in September 2000.

Types of urban tenure systems

While the importance of land issues has been widely recognized for many years, urban land tenure and property rights in developing countries have not been a subject of significant academic or professional interest until relatively recently. Furthermore, the amount of empirical evidence dealing with the full range of statutory, customary and informal or non-statutory systems of urban land tenure and property rights, together with the dynamics of their interaction, remains extremely limited.

Different studies have identified a wide range of formal and informal tenure systems and established that these systems are based on a wide range of cultural and historical influences. Among the most common types of tenure, the following are identified: private, public, informal, customary and religious.

Different forms of tenure and rights commonly coexist within the same settlement and individual plots can change from one category to another over time. We should, therefore, not think of tenure strictly as formal or informal, but instead, acknowledge a broader range of systems. The coexistence of different types of tenure categories within most land

and housing markets creates a complex series of relationships. Policy related to any one has major and often unintended repercussions on the others. There may also be more than one legal tenure system operating in the same city, as in the case of Islamic societies or those where customary tenure operates alongside statutory systems.

Informal settlements often outnumber legally planned developments in developing countries and are increasing more rapidly. Despite their population size, informal settlements only take up a small surface area of the city, as exemplified by Nairobi where the slum dwellers constitute around 60 percent of the population, yet live on only 5 percent of the residential area. The negative effects on the poor are high and governments and local authorities are increasingly losing control over urban development.

Informal tenure systems include a wide range of categories with varying degrees of legality or illegality. They include regularized and unregularized squatting, unauthorized subdivisions on legally owned land and various forms of unofficial rental arrangements. In many of the world's slum areas, several forms of tenure may coexist on the same plot, as in Calcutta, where 'thika' tenants rent plots and then sublet rooms to others who sublet beds on a shift system, with each party entitled to certain rights.

Reforms in urban land tenure – the issue of security

Many governments and international funding agencies have taken the conventional route of providing individual land titles, either within informal settlements or in locations to which settlers are relocated. The intention is to provide high levels of security and property rights in a way that will enable poor households to obtain access to services and help individuals to escape poverty. At present, there are indications, however, that the claimed benefits of titling have been exaggerated.

It is observed that many households are not interested in obtaining titles because of the costs and time involved, and the risk of losing their land if they have to pledge their deeds to obtain a bank loan. It is also noted that most bank lending is not asset- but revenue-based, so the provision of titles will not necessarily increase access to formal credit. Quite understandably, banks are normally unwilling to lend money to the poor when the only security is a house or shack in a poor area of the city.

In addition to the exaggerated benefits of titling, significant drawbacks of titling have been identified. These include the provision of windfall profits to squatter 'owners' who sell up as soon as informal tenure is granted, the eviction of tenants or imposition of higher rents upon them, the resulting growth of new unauthorized settlements by groups hoping formal titles will also be awarded to new areas, the heavy burden placed on land registries, and the potential distortion in property prices, caused by the buying up of newly formalized settlements by higher income groups who may capture much of the subsidies.

Formal financial institutions in most developing countries are at varying levels of development. However, even in a country like India, which has developed a better housing finance industry relative to other low-income countries, only 22 percent of new homes are financed through mortgaging. It is mainly the upper and upper-middle income groups that qualify for loans. In Uganda, whereas only 200 mortgage loans are issued yearly, 50,000 new urban dwellings are built. In Nairobi, Kenya, people jokingly say that "only bankers" can get mortgages.

More seriously, some governments have used titling programmes as an excuse to evict informal settlers from prime inner-city sites and granted them titles on plots outside the city, far from sources of livelihoods and services, and lacking or limited means of transportation. It is also expensive for governments to grant titles to settlers on private land, the market values of which may approach European or American levels. Finally, the administrative costs and complexity of titling programmes may reduce demand, although this may also be an indication that people feel secure, even without titles.

In general, public debate about tenure, which De Soto has done much to bring to the centre stage, can now be based on a wealth of empirical evidence. For example, international experience shows that even the poor will invest what they can if they have reasonable security. Besides ownership, it has been proven that, for example, non-eviction guidelines enforced by the state, occupancy licences or lease arrangements can provide adequate security for people to feel safe and invest in their homes and livelihoods. However, titles are not the only means of ensuring security. Many people achieve this through political pressure, collecting receipts for utilities payments, or simply by sheer force of numbers.

The World Bank now acknowledges that formal titles are not always necessary or sufficient for high levels of tenure security. Similarly, the EU Land policy guidelines state that land registration or titling was thought necessary to achieve security of rights, increased productivity, and access to credit. However, experience shows that titles may be neither necessary nor sufficient to achieve these aims.

There seems to be a consensus that the primary objective of tenure policy should be to ensure protection for all households from forced eviction and that due notice and reasonable options for alternative accommodation are given. Many intermediate options have been identified, which appear to offer improved security, increased public sector influence over land development, modest increase in tax revenue and practical options for financing land development.

Several options are used in different parts of the world. Examples of such are described below but they should not be followed unconditionally for there is no one-size-fits-all blue print for tenure policy.

One option is to increase the rights of residents without changing the formal tenure status. The certificates of use in Botswana and Lesotho are one example. The arrangements in Hyderabad, India, where some slum settlements are designated “un-objectionable”, and are therefore to be officially tolerated, is another. In high-density areas, it may be appropriate to offer condominium ownership, along the lines being implemented in Brazil, Malaysia, Thailand and the Philippines.

A further option is to extend existing customary arrangements, as is done in Egypt. Here a ground rent, or ‘hekr’ is charged to informal settlers on government or unclaimed desert land. This does not grant title, nor can it be transferred, but if households have to be displaced, it ensures that they will receive compensation for the buildings they have erected on their plots. Such an arrangement distinguishes between the ownership of land and the ownership of property and facilitates access to plots by the poor, which would otherwise have been beyond their means.

Urban agriculture

Urbanization in most developing countries is progressing at alarming rates. With the urban population growing about three times faster than that of rural areas, many cities in the south have difficulties creating

sufficient formal employment opportunities and providing basic services for their residents. As a consequence, urban poverty and food insecurity are on the rise.

Various studies and projects indicate that the legitimisation and official support of urban and peri-urban agriculture contributes to poverty reduction by enhancing access of the urban poor to fresh and nutritious food at affordable prices, generating additional income and stimulating micro-enterprise development.

More and more cities have recognized the importance of urban agriculture and are supporting it actively, but as a result, urban agriculture is competing for land with other urban land uses. It is important to recognise this sort of conflict and the local authorities must see it as their task to make clear and comprehensible spatial plans where land use for peri-urban areas is considered. In many cities, human settlements grow most in peri-urban areas, which is also often hardly controlled in terms of spatial regulations as it falls outside the city boundaries.

Water

Water is vital for food production, human health, local livelihoods and environmental health. Where water is plentiful, people often do not know or care who else may be sharing the same river, lake or aquifer. As the population grows, water demands increase for households, farms, industry and the environment. In turn, this leads to water scarcity.

The increasing scarcity and competition for water has attracted growing attention to water rights in recent years. With increasing global competition, how property rights are defined, who benefits from these rights, and how they are enforced become fundamental, not only in terms of efficiency, but also in equity and environmental sustainability.

Types of water rights

Water has distinct characteristics that differ from other resources, which consequently makes rights to it more difficult to define. Water is mobile and the majority of water use depends on flows. After water is diverted, some evaporates or is transpired by plants, but much water also runs back through surface channels and aquifers to be reused further downstream. Cultivation of crops, planting or cutting of trees, and other changes in land use transform the quantity and timing of water flows into and out of aquifers and rivers. Almost all water has multiple overlapping uses and users. All uses not only withdraw some water, but also add something to the water, which affects the quality for users downstream.

Water rights can be defined as a legal right: to abstract or divert and use a specified quantity of water from a natural source; to impound or store a specified quantity of water in a natural source behind a dam or other hydraulic structure; or to use water in a natural source. A “natural source” includes a stream, river or lake, a reservoir created by the damming of a river, a swamp or pond, as well as groundwater from a natural spring or a well.

As water is a fluid and dynamic resource, flowing and seeping in many channels, water rights are also part of a fluid and dynamic, and rarely a single, consistent system. Control over water and its use, therefore, has been regulated in diverse ways that involve bundles of rights. These bundles assign legitimate authority and the obligations to control water, and determine the priority of water use. They lay down who has the right to appropriate water, whether or not water can be transferred, and the relation between water rights and land rights. Such bundles of

rights range from the most exclusive forms of private property rights to communal rights at the local community level, public regulation at the national or state level, agreements at the international level, or a combination of these.

In private property rights, rights are held by an individual or legal individuals, such as corporations. In water, generally only use rights are recognized for individuals, and particularly permits or licenses that give an individual a right to use water in certain ways.

Indeed, many jurisdictions do not permit the trade in water rights separate to that of the land for which they have been issued. Where it exists, the trade in water rights tends to be quite regulated. Individual transactions are generally subject to the prior approval of the water administration. This is primarily to protect against adverse impacts on third parties, specifically other water rights holders, and on the environment.

In some cases private rights go beyond just use rights, and include water allocation rights, as in Chile's tradable water rights systems, which allow holders to transfer water rights to others through sale or lease. Only in Chile has an unregulated water rights market existed since 1981. For their supporters, tradable water rights offer a number of claimed advantages. Apart from ensuring a more economically efficient allocation rather than the planned approach of most water rights regimes, tradable water rights are also seen as a relatively painless means of re-allocating water rights, and thus water, from less to more economically productive uses.

In common water rights, water can be used by people in the ways specified by some community or user group. The community or the user group has the right to allocate water and specifies who may or may not use water, and in what ways.

In public water rights, governments allocate rights to users. This may be done either through government agencies or by acting as a licensing or leasing agent for granting water rights. In Zimbabwe, for example, the water reform in the 1990s declared that all water was the property of the state and that water rights could be obtained through acquiring water permits, giving legal license to use but not to own water. Similarly, in Mozambique, the Water Act of 1991 regard water as a public good, and allows people to acquire a renewable water license valid for five years.

Despite the range of applicable legal frameworks, there may still be some water uses that are not recognized as legitimate in any of those frameworks (i.e. not recognized as legitimate by anyone except perhaps the users themselves). Thus, at times there is a need to distinguish between rights: those that are legitimized use and those that include mere access to water without a recognized claim. The latter may be a case of open access (where no rights or management regime operates), or may be tolerated by the rights holders as long as it does not infringe upon their water use. As water becomes scarce, open access or tolerated use is likely to lose out most rapidly, unless the users are able to establish their claim, based on long-term use or other means.

The delineation of water rights is further complicated when taking into consideration the multiple uses (irrigation, domestic, fishing, livestock, industries, etc.) as well as multiple users (different villages, groups of farmers upstream and downstream, fishermen, cattle owners, etc.) of the resource. These overlapping uses bring in different government agencies, as well as different sets of norms and rules related to water.

The specific character of water resources requires forms of organization that often transcend or cut across the ordinary administrative

boundaries of the local community, district, and state. A command area of an irrigation system, for example, may lie in more than one village or a river basin may run through several countries.

Water rights in transboundary watercourses

Almost half of the earth's land surface lies within international river basins and some 263 major rivers cross international borders. International water resources include surface water, such as rivers and lakes and their tributaries, and groundwater, such as aquifers and ground basins that lie within the jurisdiction of two or more states.

Water rights and water rights regimes are strongly influenced by international law insofar as they relate to the use of the water of transboundary watercourses. International law defines how states should allocate the water of transboundary watercourses within their borders. Below follows a short discussion about water rights concerning international river basins.

Traditionally, there are five theories governing the use of international rivers

- *absolute territorial sovereignty* (the Harmon Doctrine), which ascribes upper riparian states absolute sovereignty over rivers flowing through their territory;
- *absolute territorial integrity*, which guarantees lower riparian states the use of rivers in an unaltered condition;
- *limited territorial sovereignty* or equitable utilization theory, which permits use of rivers so far as no harm is done to other riparian states;
- *limited territorial integrity*, which recognizes the existence of a community of interest among riparian states, which gives rise to a series of reciprocal rights and obligations;
- *drainage basin development* or the theory of the community of interest, which stresses the common development of rivers by all riparian states.

The last theory has become the most widely advocated by the international legal community. The theory of the community of interest recognizes that both upstream and downstream states have a legitimate interest in water resources and tries to balance their use to the mutual benefit of all parties concerned. In 1966, the International Law Association (ILA) formulated the Helsinki Rules on the Uses of Waters of International Rivers, which embodied this concept and adopted the notion of equitable utilization.

The International Law Commission (ILC) of the United Nations (UN) adopted the same concept in 1991 in the Law of the Non-Navigational Uses of International Watercourses. The main concepts and principles included in the ILC articles (ILC 1997) may be summarized as follows: The articles aim to achieve a balance between the "equitable and reasonable" utilization of an international river by any individual riparian state (article 5) on the one hand, and on the other hand the desirability of avoiding "significant harm" to other riparian states that are already using the river (article 7), or might want to use it in the future. The articles stress the riparian states' obligation to protect international rivers and associated ecosystems (articles 5, 8, 20, and 21). They oblige riparian states to cooperate in the optimal utilization and protection of the rivers that they share (article 8) and recognize that agreements between riparian states may cover the entire river basin, or only part of it

(article 3). In the latter case, however, the agreement should not “adversely affect,” to a “significant extent,” other riparian states’ use of the waters in the basin. The first paragraph of article 7 reads:

“Watercourse states shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other water-course states.” Article 10, on the relationship between different kinds of uses, reads: “In the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses.”

As far as water rights are concerned, this means that first of all, there are limits on the amount of water within a state that can be subject to water rights relating to a transboundary watercourse, as well as, potentially, the types of use to which that water may be put. Secondly, in addition to the water rights at the national level, the international dimension cannot be neglected in the case of transboundary watercourses. Management of such shared water resources must take into account many factors, including current laws, existing legal and institutional frameworks, present and future water resources and uses, climatic conditions and water availability in the basin or region concerned, water cost from different sources, and users’ ability to pay.

Relationship between water rights and land rights

Land and water are essential for development. Land use has major impacts on the quality and quantity of water resources. Conversely, the availability of water determines possible land uses. An integrated approach to land and water is therefore essential. Land tenure and water rights are the major mechanisms determining resource use and management. However, existing systems do not always work together to support development.

Historically, the right to use water has depended on the existence of a land tenure right. In much of Africa and Asia, it is difficult to identify water rights as they are so intrinsically linked to land. In most European countries, land ownership or rental is required in order to have rights to abstract water. In the eastern states of the US, the eastern provinces of Canada, and in the UK, allocation of water is governed by the law of riparian right, borrowed from English common law. Only those who own property adjoining lakes or streams are allowed to abstract water from those bodies of water, and then, only in a manner that does not interfere with the rights of other riparian users; i.e. “authorization” to use water in a stream or other water body, based on the ownership of adjacent land. Water rights under the riparian doctrine belong to the land and cannot be sold without the land.

There are several key themes where a lack of communication between people working on land rights and those working on water rights presents particular difficulties. One of the most important areas is irrigated land, which currently produces 40 percent of the world’s food.

In irrigation systems, land rights are key to obtaining water. For irrigators, a lack of secure access to water reduces the value of any land tenure rights. The water rights of irrigators depend on the institutional arrangements of the irrigation system. They are extremely variable as land tenure legislation usually makes no distinction between irrigable and non-irrigable land.

Ground water, which supplies much irrigation and drinking water, is an increasingly fragile resource, with withdrawal rates increasing.

Existing approaches to water rights apply the same principles to both ground and surface water. However, laws restricting the withdrawal of groundwater are often impossible to enforce.

In many places, traditional rights to land and water exist alongside formal legal rights. Traditional rights may be the only ones actually applied at a local level. This makes the relationship between land tenure rights and water rights even more complex. In Kenya, for example, strong norms specify that everyone has the right to use water. However, much of the land has been privatized. In the Nyando basin, land-purchasing companies bought land from large-scale white farmers, then subdivided and sold all of the land to small landholders, without any regard to the slope of the plots' location relative to water. As a result, many had no access to the spring or rivers, and thus could not even get water for basic domestic needs. The few public access points – such as bridges – became over-used. Furthermore, communities faced considerable obstacles to developing water sources if they lacked control over the land as well.

The linkage between land rights and water rights can also be illustrated in the case of wetlands and semi-arid rangelands. In the case of wetlands, control over land also gives water. Here, land is scarcer than water; hence, it makes sense to concentrate on allocating land. In contrast, in dry areas, water rights are key to controlling and using land for pastures. Access to water points opens up the possibility to use large areas of grazing land for migratory pastoralists. In Africa, both wetlands and dry lands are important resources. Hence, for these resources, the principle of interconnected land and water rights are important to understand.

Water rights reform

Currently, much attention to water rights reform looks away from making water rights separable from rights over land. This particularly applies to cases in the western United States, Chile and Australia, where growing demand for water for non-agricultural uses in cities and industries creates pressure to transfer water away from agriculture. At a policy level, governments and international agencies, however, approach land tenure and water rights as separate issues, despite calling for integrated management of land and water.

Securing access to land and water is a key element of both survival and livelihood strategies for the poor. While many reforms seek to strengthen the land tenure rights of the poor, the relationship between water rights, poverty and livelihoods is less clear. Reducing poverty is rarely a priority of water rights reform. The issue between water rights, poverty and livelihoods has been linked mostly to safe drinking water and the human right to water, and less to individual water rights.

The main drivers for reform have related to concerns about whether or not water resources are sufficient in regards to existing water rights, current and planned uses of water, and land.

Very often, the basis for water law reform is quite technically biased in favour of the complex disciplines that make up water resources management. Generally speaking, water rights reforms have had fewer redistributive or socioeconomic objectives than reforms to land tenure rights. An exception is South Africa, which has enacted a Water Act seeking to implement the two key principles – “sustainability” and “equity” – of the 1997 National Water Policy.

In recent years, concerns about the effects of large-scale water abstractions on the environment have played an increasingly important role in

water sector reforms seeking to promote the sustainable management and use of water resources. In this regard, key objectives for water management, which have been influential in guiding the shape of water-sector reforms, including reforms to water rights, are the “Dublin Principles,”² which is an attempt to concisely state the main issues and thrust of water management. The growing trend is towards integrated water resources management (IWRM) to overcome the divide created by spreading the authority over land and water out over different government agencies.

Wetlands/coastal resources

Coasts and wetlands (including natural freshwater wetlands, rice paddies, mangroves, coral reefs, salt marshes, coastal flats, sea grass meadows, karsts, caves, and reservoirs) cover approximately 26 percent of the world’s land mass. Coastal resources and wetlands are important for the poor around the world. Fish and shellfish provide a sixth of the animal protein consumed in the world and small-scale fishing is vital for food security and poverty alleviation in many developing countries. Intact and functioning wetlands are the primary source of survival for many of the socially and economically excluded in the developing world. At the same time, coasts and wetlands are very often biodiversity hotspots that help regulate regional ecosystems. Around the world, however, coasts and wetlands are facing degradation.

A growing body of literature claims that fishery resources are in a state of crisis, expressed both in estimates of biomass of fish and in declining catch rates. It is estimated that 40 percent of the world’s major fisheries are fully fished and 25 percent are over-fished. Furthermore, over-fishing is a major cause of the ongoing degradation of coral reefs. The loss of wetlands has been estimated at 50 percent of the area that existed in 1900. However, outside Western Europe and North America, there is little information available on wetland loss. Tenure policies are a central part of the governance of natural resources and it is increasingly clear that absence of tenure policies or the existence of inappropriate ones are one of the main causes of degradation of coastal resources and wetlands.

Tenure systems relevant to coastal fisheries and wetlands

While coastal resources (fisheries) are often characterized by open access or lack of appropriate tenure systems, wetlands tend to be characterized by conflicts between different tenure systems (e.g. land tenure and water resource tenure).

In many developing countries, tenure and tenure rights related to coastal fishery resources are insufficiently defined and regulated. For example, in Central America, access to fish is formally restricted to fishers who have a license to fish. However, since there is rarely any limitation on the number of licenses, combined with a limited capacity to monitor and control that fishermen have a license and fish according to prescribed regulations and norms, coastal fishing is predominantly open access in practice. The often prevailing common access nature of coastal fishery resources, difficulties in controlling catch levels and supranational requirements for effective control challenge the effective enforcement of tenure policies by national and regional institutions.

² A meeting in Dublin in 1992 gave rise to four principles that have been the basis for much of the subsequent water sector reform. The International Conference on Water and Environment, Dublin, Ireland, January 1992

Attempts to manage wetlands generally have a poor record because different groups use wetlands for different needs, one user group has limited influence over the total use of the wetland, and because joint management arrangements are vulnerable to free-riding. In cases where wetlands are managed as common pool resources, state appropriation or imposition of private property rights can lead to the unsustainable utilization of wetland resources or the conversion of wetlands for other uses.

A number of good examples of approaches have been identified, which are relevant for tenure of both coastal resources and wetlands:

The ecosystem approach addresses the abiotic and human components of ecosystems in a holistic fashion and relies on a strong framework that clearly recognizes relevant participants, their resources, access rights and obligations. The approach is articulated in the Code of Conduct for Responsible Fisheries, adopted by the FAO member states in 1995.

Co-management emphasizes the sharing of rights and obligations between local users of coastal and wetland resources. However, co-management systems require extensive initial resources in the form of extension, education, awareness building and technical assistance.

The *establishment of protected* areas for particularly environmentally critical coastal and wetland areas is, of course, an effective way to regulate the use of vital natural resources. This does not necessarily mean that people dependent on such areas are cut off from a very important source of livelihood, but that their use of natural resources is clearly regulated. Protected coastal areas have a potential to attract tourists, which can serve as an alternative source of livelihood instead of direct natural resource use.

Changing exploitation patterns can be reached through a number of direct regulations, such as gear regulations, setting the legal fish size, and temporarily or seasonally closed areas.

Customary tenure systems are relatively common along coasts and wetlands and have the benefit of being accepted among the majority of local resource users. A common claim in the literature is the need for increased knowledge and acknowledgement of such systems as important components in sustainable resource tenure. For example, in Africa, Indonesia and Central America, there are examples of coastal and inland fishing waters where access rights of both water and adjacent land are linked to customary territories.

Poverty and tenure of coastal resources and wetlands

The necessary link between poverty and the degradation of coastal resources and wetlands have been increasingly addressed in the last five to seven years by FAO, the World Bank, the 9th Ramsar Convention and other international bodies. The seemingly joint conclusion is that efforts made to protect threatened coastal resources and wetlands should not be allowed to have negative effects on poverty alleviation. Tenure systems and access rights have to be designed to benefit or at least not negatively affect the poor. If resource use is restricted, alternatives must be available to the poor. An obstacle that forms part of the challenge to identify and design pro-poor tenure systems is that poverty alleviation and natural resource conservation/management often constitute two separate sectors

that are only rarely connected. For example, FAO has shown that the extent to which national poverty alleviation strategies target the fishery sector is very limited. Subsequently, calls for increased integration between the two sectors are common in recent literature for both coastal resources and wetlands.

Box 2. Landscapes of extinction towards landscapes of confidence? Beyond private and public ownership: common fishing as sustainable sea-resource management in artisan fishing communities: Case study from Chile.

In Chile, the indiscriminate extraction of the edible shellfish, *Concholepas concholepas*, Chilean 'loco' or false abalone – propitiated by a neo-liberal market economy during the 1970s – almost lead to its extinction, threatening both the survival of small-scale artisan fisher and the eco-system. As a solution, and to reverse this development, fishermen's unions in Chile have been adopting the State-created Management and Exploitation Areas for Benthic Resources (MEABR or MAs) since the 1990s. Benthic resources are organisms that live in contact with the sea bottom (e.g. snails, crabs, clams, mussels).

Substituting open access, the MAs empower the fishermen with exclusive territorial use rights (TURFs) to manage the species under the institutions of the commons. However, often new solutions bring new problems. With the new extraction methods and expansion of the MAs, fishermen experience a transition from nomadic to sedentary fishing, transforming their lifestyle and skills. If the MAs prove to be sustainable, permanent fishing in rural areas may lead to tensions as fishermen settle on coastal lands not belonging to them, or are otherwise hindered from developing their own infrastructure.

Who is in control of Chile's 18,771 kilometre-long continental coastline? Private property dominates in most of the country, including lands adjacent to the sea, rivers and lakes, constraining the rights of others; the jurisdiction of the state and its citizens thus being restricted. This does not exclude the MAs, most of which fall within private estates.

The MAs were introduced in 1992. Prior to May 2000, 20 percent of the registered fishing organizations in the country had applied for 103 MAs. By June 2006, their total number had increased to 559, of which 365 had approved management plans. The total number of organizations standing behind the 559 MAs was about 320. In 14 years, the MAs had expanded all over the Chilean coast, embracing almost every cove and almost half of the artisan fishing organizations – about 40 percent of its members.

Using a principally participatory rural appraisal (PRA) for El Quisco (2001) and interviews with qualified informers for Puerto Oscuro (2002-2006), the purpose of the study was to qualitatively evaluate fishers' perspective on the Chilean TURFs through these two areas. While the assessment of El Quisco dealt more with the performance of their MAs, Puerto Oscuro was used to portray the landscapes of conflicts as the ownership/claim of the land closest to the coves is contested; a problem that also affects other rural fishing organizations as their MAs are surrounded by private landholdings.

The study showed that although the MAs have brought better incomes, their economic importance for the fishers has been reduced, compared to other fishing activities. Experiences from both cases studied have otherwise been positive in terms of the recuperation of the species, the fishers' environmental concerns and strengthening the unions as social organizations. However, many problems still remain; among them, the problem of access to the land.

Gallardo, G., 2006

Rangelands

Rangelands (grazing areas) are mainly found in arid and semi-arid areas and account for 20 percent of the world's land surface, or twice as much as the land area used for crops. In addition, about 25 percent of the world's cultivated areas are used to grow livestock feed, and mixed crop-livestock systems have historically been the basis for agricultural intensification and increased production. Areas under fodder production and mixed crop-livestock systems are included in the above discussion about agricultural land. In addition, forests are being converted to grazing lands at a rate of 600,000 km²/decade, mainly for privately-owned, commercial, large-scale beef production.

Grazing areas consist mainly of land that is less favourable for crop production. Rangelands are strongly characterized by patchiness of resources and resilience in the face of climatic extremes, and vegetation (especially where water resources are short) has adapted to patchy and variable rainfall. As a result, not only pasture availability, but also pasture quality may vary substantially.

Traditional pastoralists broadly accept pasture and rainfall as givens and adapt their social and herding systems to take best advantage of them. Many grazing areas also have multiple land uses; e.g. areas where people collect wild foods, herbs, honey production, etc. If the areas are covered with shrubs or scattered trees, then many wooden products are harvested as well. When the grazing area is reduced (e.g. as a result of land conversion for other uses) overgrazing often becomes a problem. Not only is the available grazing area reduced, but animal movement between grazing lands – an essential strategy used by pastoralists to optimize resource use – is also restricted. Rotational grazing systems are often by far the most effective way to optimize resource use. It is increasingly recognized that the area currently available for pastoralists is decreasing.

The CCD (Convention to Combat Desertification), to which Sweden is a party, has a thematic programme network on rangeland management in one of its seven action programmes. All national action plans thus contain activities concerning range and pastoralist management. The CCD Secretariat and the International Livestock Research Institute (ILRI) jointly organized several workshops on the issue.

Examples of tenure systems commonly used in grazing areas

Open access: Many grazing areas (and just as many forests) are de facto open access resources, as a tenure regime (e.g. Protected Area) may exist on paper but not in reality.

Common property: However, grazing lands utilized by pastoralists are mostly under common property management regimes. Grazing areas can be utilized by different ethnic groups at different times, and are regulated by customary rights. However, customary management regimes are, in many cases, becoming weaker due to increasing pressure on lands.

Private property: Nomads and indigenous groups rarely own the land; instead, they own their livestock. In Gambia, for example, land cannot normally be bought or sold, so investment goes into livestock. The slaughtering of livestock ensures that meat is frequently shared with the community; animals are lent to relatives, with both borrower and lender benefiting. As well as sharing risks, attempts are made to spread risks.

Larger scale commercial cattle ranches (e.g. in Latin America) are commonly under private ownership or are granted long-term land concessions.

Box 3. Ethiopia

Overgrazing in Ethiopia has become severe as pastoralists are limited to small areas and their traditional communal alternate-dry-and-wet season continuous grazing system is not being practiced. Declining returns from range/livestock result in increasing poverty and migration to urban areas. It also encourages farming of marginal areas which, in turn, further increases degradation. Traditional nomadic grazing lands have been taken over as irrigated agriculture has increased and the designation of parks has pushed pastoralists out to marginal areas. Overgrazing is also exacerbated by inappropriate development of watering points for livestock, which has disrupted the rhythm of movement between wet and dry season grazing areas and has led to long periods of concentration of live-stock around watering points. Rangelands were largely controlled by pastoral clans until the 1960s.

The absence of land-use planning became the root cause of conflict between the government and peasants and/or pastoralists who traditionally depended on the land prior to “developmental interventions.” While the full impact of the nationalization of rural land was less felt by pastoralists, the new land policy did not halt the expansion of crop farming in traditional rangelands. Pastoralists demanded a favourable policy that might have abated this encroachment, but the government did not respond favourably (ref: Ethiopia’s country report for CCD).

Particular issues and areas of debate

Tenure policies disfavour pastoralists

Inappropriate land tenure policies are major contributors to environmental degradation in arid/semi-arid grazing systems. A huge body of literature is in virtually total agreement that the world’s grazing lands are the most degraded lands on earth. The world’s three billion ruminants, of which one billion are beef cattle, are increasingly contributing to overgrazing. In many countries with common grazing areas, there is no administrative mechanism for limiting livestock populations to sustainable yield of rangelands. Lack of clear tenure systems (i.e. de facto open access) of rangelands often prevents further investments in land improvement.

There are, however (just as there are for forest areas; see section below on forest land), also many examples where customary and common property types of tenure systems receive more attention.

A forgotten issue

The patterns described above show how pastoralists and small-scale livestock keepers are generally being marginalized as traditional grazing areas are decreasing or subject to degradation. Donors do not prioritize these issues or those mentioned above. The most vulnerable people – women and the very poor – are more likely to own sheep and goats than cattle, and supervision of the animals, theft, and diseases are often bigger and more immediate problems than, for example, overgrazing or land tenure issues.

Invisible uses – invisible users

For wealthy livestock owners, uncultivated land is most important as a source of forage; for the very poor, it is most important for resources such

as firewood and raw materials for construction and handicrafts. By identifying a piece of land only as “rangeland,” there is a danger that other uses and users will be forgotten or excluded. Normally the poorest tend to rely on the “bush” the most.

Fodder, food or biofuels

Today, there is increasing pressure also on rangelands, where soy bean are cultivated or fast-growing trees, such as the Eucalyptus or *Jatropha curcas*, are being planted for purposes such as biofuel production. This is a “new” issue, particularly relevant in semi-arid areas with higher rainfall, and in areas with either open access or common property management (customary use).

Forest land

The world’s natural forests have been decreasing for a long time at a relatively fast rate. Planted forest area is increasing. This includes household level management of trees (e.g. agro-forestry plots in the vicinity of houses and farms) as well as larger-scale plantation forests. While planted forests used to be largely under state ownership, they are currently often held as individual private property. Most natural forests (75 percent) are officially held as common property or public property (owned by the state).

Box 4. Some figures about forest resource rights

Approximately 77 percent of the world’s forests are, according to national law, owned by governments. Of the 77 percent, there are large areas actually managed (or used) by local groups, but who do not have the legal rights to the land. This figure also includes forest lands that are under concession to logging companies.

In developing countries, community reserves constitute 8 percent of the forest area, and communities own about 14 percent. Community reserves is land set aside by governments for local groups and indigenous people who have use or access rights, but the government still holds the legal title and thus, the ultimate rights to the land.

Natural forests and planted (and/or different types of) secondary forests differ in many respects (biodiversity, proneness to calamities, influence on soil and water, economic and management system needed to use the resource, etc.). However, the extent to which they differ varies among the different types of planted forest areas, with the biggest differences generally found between natural forests and large-scale mono-crop forest plantations.

Today, plantation forests are often part of an industrial system. In such cases, their main value in poverty alleviation is providing jobs for those living in the vicinity of the plantations or the forest industry. The plantation forest also has an environmental value (carbon sink, water retention, soil retention, etc.), but this is different than the environmental values of natural forests.

Natural forests often play an important role in subsistence economy systems (fruits, fodder, fuel wood, grazing, green vegetables, etc.) and are relatively more important to disadvantaged groups in society, a fact that should be borne in mind when trying to address poverty issues. Hence, while forests are valuable safety nets, they are also considered to be a poverty trap by some.

In many places in the world, there are small community or family-owned or managed plantations. Trees may be used as cash crops for the industry but the more common purpose is gathering timber, as well as various non-timber forest products, for the household. Such plantations may also form part of a watershed management system.

It is sometimes difficult to differentiate between forest land and agricultural land, especially in areas where shifting cultivation is used. In many areas, forest land is potential agricultural land and the notion that the community may run out of forest land may not be present. In natural forests, many layered rights normally exist.

Types of rights and tenure systems in forests

Property rights to forests and forest resources often overlap, and are confusing and difficult to enforce. While local people generally adhere to customary or traditional tenure systems, governments tend to install a “modernized” formal property rights system, which in many cases, designates the state as the sole owner of forest land. The insecurity regarding which rules to abide undermines good forest management. While security in tenure is not sufficient to safeguard sustainable management, it is often a necessary prerequisite.

Open access

Large areas of forests in the world are de facto open access resources. In most cases, a tenure regime exists on paper but not in practice. While reasons for the open access state of many forests may differ according to the observer, there are several common points:

- The traditional management system for most forests was a functioning common property system. The colonial states in many third world countries, as well nations liberated later on, decided that forests were state property. The denial of the rights of a traditional system, combined with a lack of state competence and the means to enforce the state’s legal ownership rights, resulted in limbo, where none of the rules for use were followed.
- According to other observers, the main reason for the open access state of large forest areas is that traditional systems of common property were not strong, stable or resilient enough to develop and survive population growth, changing norms in society and a changing economic environment. The systems collapsed and resulted in “lawlessness.”
- In recent publications on property rights, it is claimed that one of the main reasons for the depletion of natural resources in many of the third world countries is that in reality the traditional system and the modernized system exist intertwined and that this gives opportunities for certain groups in society to use specific parts of the two systems when it suits them best in order to increase their landholdings.

Common property

In traditional systems, forests are or were commonly managed as a common property. Some natural resources can produce more or are otherwise more easily managed if managed in larger sections by a group. Rights to grazing, fishing and some uses of water (irrigation systems) are claimed to belong to this group. Natural forests are also a resource that is sometimes considered to be more efficiently managed under common property regimes. The areas are often vast and relatively remote, and the

specific resources collected in the forest are unevenly spread.

For decades, little attention was paid to analyzing and much less to promoting common property regimes. Common property regimes were mostly confused with open access (see for example the (in)famous article, “The tragedy of the commons,” by Hardin G., 1968).

The traditional common property systems for forests are threatened, however, by an increase in population, weak legal rights of the owner groups, the occasionally decreasing social capital in the groups, and not least, the higher market value a forest may get. If the population increases, it will become more difficult to exclude others who want to use the resource. If the legal rights of the user groups are weak, then they might not be able to defend the resource against exploitation from outsiders, such as timber companies. If traditional knowledge, customs, beliefs and culture are eroded, then the value base for managing the resource commonly might disappear. If or when forests (or the forest land) receive a higher market value, strong incentives are in place for privatization and/or more commercial utilization.

In recent years, this type of ownership has received more attention and is increasingly being backed by formal legal systems, in the form of community forestry acts (or similar). Functioning common property systems for natural forests use the resource efficiently and provide a sustainable supply of non-timber forest products, such as green vegetables, fruits, nuts, mushrooms, spices, medicinal plants, game meat and fish, weaving material, tools, construction materials and cooking utensils. There are also many examples of decentralized (village/community level) forest management where villages and/or cooperatives (either fully decentralized or through co-management with local forest authorities) have rights to manage the forest areas, including harvesting and deforestation.

Private property

Private property exists in different forms (from long-term, legally recognized rights – e.g. household-level user rights – to formal ownership) and scales (from household-level titles to large-scale forest concessions). As already noted, there is a clear tendency towards increasing privatisation when market opportunities and the market value of forests and/or forest land increase.

Today, private property is the predominant tenure system for larger plantation forests (although originally often state-owned). For natural forests, forest companies can often attain property rights for trees (but not the land) from governments who sell or lease out concessions. Often such concessions, as well as the land designated for plantations, are given out for land that is formally (national law) the property of the state, but according to customary law, the property of communities living in those forests. In many developing countries, forest concessions are framed on paper, representing rather good legislation aiming at sustainable use, but very seldom enforced. The reasons for this are manifold. Forests are often remote and it is difficult to enforce and monitor implementation of legislation with limited resources. Corruption is also common in the forest sector of many countries.

In small-scale forest plantations, trees are often kept as household property and are normally located in the vicinity of the house or in agricultural fields.

Box 5. Sharing benefits from the forest in Tanzania: Community-based forest management in Suledo

A good example of how local communities can sustainably manage biodiversity resources can be found in the south-east corner of the Kiteto District in Suledo, on the famous Masaai Steppe in Tanzania. The forest in Suledo provides many important products and services to the nine multiethnic villages in the area. In Masaai land, grazing is a core use of the forest. In addition, the forest provides many other products, such as fruits, nuts, medicines and mushrooms. As the area is undulating, the hills further function as small water catchments. The forest also has an important role in initiation ceremonies, which is a crucial part of local customs.

Increasing pressure for land, however, has brought more and more land under agriculture. To halt the ongoing deforestation, the government decided to declare the whole area a National Forest Reserve in 1994. This, however, would have restricted the local communities' access to the forest. Community members therefore protested, organized, and decided to manage the forest by themselves and for themselves. Local management plans outlining regulations for use, management and benefit-sharing were defined, based on traditional knowledge and institutions. The rules were passed by the respective village assemblies as village bylaws and upon approval by the district council, they gained full legal status. The whole process was facilitated by the district forest officer and backed by the Sida-supported Land Management Programme (LAMP), now being implemented by the Kiteto District Council.

Until today, the nine villages have been surprisingly successful in implementing their management plans at no cost to the government. Key resources for local livelihoods are efficiently managed and protected, biodiversity is utilized in a sustainable manner and the forest continues to provide important eco-system services, such as watershed protection. The initiative has had a direct impact on the formulation of the Tanzania Forest Policy of 1998 and the Forest Act of 2002. With the strong policy support that now exists, the vision is to scale up the activities in the field so that eventually every village in Tanzania could have its own village-managed forest.

Particular issues and areas of debate

Support tenure rights of local communities

The hegemony of states as owners and managers of forests is declining. One trend is towards increased privatization. Governments are also starting to realize that they have not been able to manage the forests in a sustainable manner and that local people (often indigenous groups) have rights and claims to forests that should be accommodated in legislation and practice. Besides being a rights issue, there is also increasing evidence that local communities can play an important role in managing forest resources in a sustainable manner while improving local livelihoods.

Many forest countries have changed legislation in recent years in order to strengthen indigenous or local ownership. This trend has grown stronger in the last 15 years. Besides the outright changes in ownership, there are also substantial areas that have come under different degrees of local management. This process needs to be supported and strengthened. A lesson from these experiences is that in order for community ownership to be effective, there must be a legal and policy environment to support it. Official, legal recognition of community-based rights to forest resources must be feasible to acquire and defensible in both political and judicial arenas.

Besides the process of changing legislation and rules in favour of local communities, there is a need to support the internal work of groups who

manage common property. Community groups have their own challenges of building and transforming traditional governance systems in order to manage their forests in such a way that it meets modern demands.

In short, clearly identifying and recognizing the property rights of the indigenous and other qualified local community groups can potentially contribute to fairer, more effective and efficient sustainable management of forest resources.

Invisible use

While local uses of forests are often invisible to an outside observer, they are nevertheless crucial for local people. Local people often have weak tenure rights, supported only in customary law. Development initiatives aimed at more intensive use of the land can easily result in traditional “invisible” and/or extensive use being overruled. Development projects (development support or commercial) normally aim to support intensified use of land. Intensification tends towards mono-cropping, resulting in local people losing many of the inputs they need for their livelihoods. All actors involved are (rightfully) working towards intensification in terms of increased output per ha (in cash or subsistence crops) and the former use, often by poorer groups or women, is neglected or forgotten. If intensification occurs, be it grazing, small-scale agriculture, large-scale agriculture, forest plantations or other use, then the manner in which local people are able to substitute all the goods previously received from the forest or bush land has to be taken into consideration.

Vulnerability

Natural forests and bush land often supply local people with distress foods and resources during difficult times. Communities or groups of people who live in areas where they can barely make a living from agriculture will more likely use resources from forest and bush land. Extensively used forests and bush land are thus relatively more important for vulnerable groups in society.

The beneficiaries of privatization on an individual basis of natural forests or bush land in order to improve management and production, will most of the times not be the most vulnerable social groups. Furthermore, where there is a clear possibility of improving the production of forests or bush land, either by intensification or conversion to other land uses, one must keep in mind the consequences for vulnerable groups that previously used the area.

Poverty alleviation

Non-timber forest products are used by all communities and groups living in or in the vicinity of a forest. Several case studies show however that society’s poorer groups receive a higher proportion of their household income or subsistence goods from the forest. Any action depriving people from continuing their use of natural forests and bush land will consequently have a relatively stronger negative impact on poorer groups.

Food security

Food resources gathered in the forest sometimes make a good complement to the crops grown in the fields. The crops from the field give energy and the non-timber forest products give vitamins, proteins and minerals. While conversion of forest lands to uses yielding more cash

value (rubber, sugar, oil palm, etc.) will give a higher profit, it will also deprive local people of their food sovereignty and deteriorate their nutritional status.

Clashes between systems

Forests for subsistence use by local communities and, in most cases, for gathering products for the market (cash income) are in most cases probably best utilized as a common property. Common property resource management can be efficient and sustainable under the right circumstances. Groups have to be backed by customary law and national legislation, which need to be transparent and accountable. If there is a push for privatization of forest land to individual property, the costs for this has to be very carefully weighed against the possible gains. Since privatization and titling is very costly to administer, monitor and enforce, the risk of failure is substantial. With failure of the formal system being enforced and the traditional system no longer functioning, open access will result.

Climate change and biofuels

The discussions and development related to climate change and biofuels have a strong bearing on tenure rights. An emerging issue is the rapid expansion of large-scale biofuel plantations, associated with land concessions given to private investors. While this may be important for new jobs and income opportunities in rural areas, there is also a clear risk that common property and/or collective rights are not acknowledged, and that rights as well as livelihoods of local communities and indigenous peoples may be compromised.

Another important issue is the present debate about options for including compensation mechanisms for prevented deforestation, under the Clean Development Mechanism, where questions of who will actually benefit and to what extent poor and marginal groups will be affected are strongly linked to tenure rights.

Protected areas and wildlife

Protected areas, as well restrictions on the use of wildlife and plants, are measures taken to ensure that endangered species and/or habitats are protected from degradation and even extinction. By definition, these restrictions entail excluding and/or regulating access to, and use of, either defined land areas and its biological resources (through different categories of protected areas, with varying degrees of protection) or restricting and/or criminalising the use of defined species, whether in or outside protected areas.

Protected areas (PAs), as well as international (and national) regulations on illegal trade of endangered species, are consequently important measures ensuring the conservation of species and habitats at local, national and global levels.

Protected areas often have substantial (normally non-monetary) values, bringing benefits, such as maintaining ecosystem services (e.g. watershed protection, buffering against natural disasters) and genetic resources. They often have considerable aesthetic, cultural and spiritual values, with many reflecting sustainable land use practices. They are also important for research and education.

A protected area designation also brings a number of potentially direct benefits, including income from entry fees, employment opportunities and tourism. In the case of wildlife (or areas with a lower degree of

protection), the sale of hunting quotas can be a very important income earner.

Officially designated PAs presently cover about 12 percent of the global land area. A large number of people, including a high proportion of indigenous peoples, are therefore directly affected, with most residing in poor and marginal areas.

Types of rights and tenure systems

Protected areas designated by the government: By 2000, the world's 3,000 officially protected areas covered over 13 million km² of the world's land surface (roughly the size of India and China combined). A much smaller proportion of the world's seas (barely one percent) are protected. The level of restriction to the area can vary considerably (see Box 7), and the zoning of an area into a complex of different regulatory categories is common. Officially protected areas can be designated at various levels, from local governments up to globally recognized areas, such as World Heritage Sites (under UNESCO). In most developing countries, where land is generally considered public, there are no landowners to compensate formally (see below).

The right to enjoy the aesthetic and educational values of PAs is probably the most obvious benefit. In many countries (e.g. Tanzania), tourists pay far higher entrance fees than nationals and/or local communities do.

Collective rights: Particularly in Latin America (but also elsewhere), large areas that often have very high conservation values, have been designated and recognized as traditional territories of indigenous peoples. In many cases, this has meant that external pressures (logging, in-migrating farmers converting the land) have been substantially reduced and consequently, the areas are better and more sustainably managed, also from a conservation perspective.

Private wildlife sanctuaries and hunting areas: A less common, but increasing type of PAs are private wildlife sanctuaries, where land owners (or private companies given a concession to the land) manage the land as a conservation business and/or hunting area. This, for example, is found in several countries in Africa.

Common property: As the section on forests shows above, local communities are managing and conserving considerable areas in a sustainable manner outside the formally protected area system. This significantly contributes to the actual PA coverage worldwide. Co-management, or community-based management, is also increasingly discussed and practiced in relation to officially protected areas, both as a means to achieve more effective conservation, and equally ensure that both benefits and costs of PAs are shared more transparently and fairly with those most directly affected. The Campfire project in Zimbabwe is a well-known example. Community wildlife trusts are emerging in many countries and in Namibia, already 30 community conservancies (covering 70,000 hectares) have been recognized, with additional 50 emerging.

Box 6. Campfire programme

An illustrative case of decentralization and empowerment of local communities is the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe. CAMPFIRE is also under adoption in a few other southern African countries. Under CAMPFIRE, local communities manage and utilize their natural resources to their exclusive economic benefit. This approach has been most effective in the management of wildlife held on communal land. As a result of the financial incentives gained, these communities now take the initiative to protect and conserve the wildlife which, in the past, they would have poached. This experience confirms the need for greater empowerment of communities over the conservation of their environment. This is only possible through delegating responsibility and authority, and creating administrative and institutional mechanisms that are legitimate, effective and accountable in the control of land use and natural resource utilization. Rural communities, therefore, can own and utilize common property resources effectively and sustainably, provided they clearly benefit from the resources and are empowered by local institutions. This concept needs to be extended to the use and management of water resources by irrigating communities.

About 90 percent of CAMPFIRE's income comes from selling hunting concessions to professional hunters and safari operators working to set government quotas. Individual hunters, who pay high fees for being able to shoot elephants (USD 12,000) and buffalos, are strictly monitored and accompanied by local, licensed professionals. Trophy hunting is considered to be the ultimate form of ecotourism as hunters usually travel in small groups, demand few amenities, cause minimal damage to the local ecosystem, yet provide considerable income. Areas with high wildlife populations sell live animals to national parks. A number of natural resources, such as crocodile eggs, caterpillars, river sand and timber, are harvested and sold by local communities. Skins and ivory may be sold from "problem animals" (who may be killed legally). In good years, money is used for the general community for building and equipping clinics and schools, constructing fences, drilling wells, building roads, paying guides and funding local sports teams. In bad years, such as during a drought, the money is given directly to the local people or used for buying maize and other foodstuffs.

from FAO: <http://www.fao.org/docrep/W7314E/w7314e0a.htm>

Key international processes

Protected areas

Protected areas are discussed in a number of international fora, including the Convention on Biological Diversity (CBD) (Article 8) that calls on contracting parties to develop systems of protected areas. Designation as a UNESCO World Heritage Sites provides the strongest legal status. The need for expanding marine areas, including in areas outside national jurisdiction, is currently a heatedly debated topic.

Many large NGOs and private foundations (e.g. the Conservation International, the Nature Conservancy, WWF) are successfully raising funds for PA work and undertaking advocacy to increase general attention and commitment to conservation. The European Union, in its prioritization of biodiversity-related work, gives very high attention to PAs, both within Europe (through the Natura 2000 network) and internationally, and there is strong lobbying for increasing funding to PAs from EU's ODA.

Endangered species

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments, aiming to ensure that international trade of wild animals and

plant specimens does not threaten their survival. Today, it accords varying degrees of protection to more than 30.000 animal and plant species, whether traded as live specimens, fur coats or dried herbs.

Particular issues and areas of debate

There are a number of important issues and debates strongly linked to tenure (rights, access, control and benefit-sharing) that are related to PAs and wildlife management.

Do protected areas marginalize local communities?

The distribution of costs and benefits of PAs tend to largely disfavour local communities and indigenous peoples. The exclusion from access and use, sometimes coupled with resettlements, means that local communities – due to loss of land, income opportunities and cultural identity – often bear a very high cost when PAs are established. At the same time, benefits are, in most cases, captured largely by the government (entrance fees, hunting licences, etc.) and or larger tourist companies (hotels, package tours), with local benefits often more marginal.

Promoting eco-tourism and various benefit-sharing arrangements (revenues from fees, etc.) with local communities are very relevant options, but unfortunately, seem to be in many cases more rhetorical than actual.

Is strengthening collective and/or common property rights a solution?

Two (partly linked, partly different) debates and developments regarding local access and local involvement in decision-making are relevant: collective rights and community-based management.

Recognition of collective rights over ancestral territories (including in PAs) is a consistent demand and request by indigenous peoples in a number of national, regional and international fora (including CBD, The United Nations Permanent Forum on Indigenous Issues) and a source of heated debate.

There is also increasing, worldwide attention on the potentials of collaborative and/or community-based (common property resource) management and formal PAs as a way of ensuring both benefit sharing with local communities and improved conservation. This, however, is not uncontested.

Box 7. Private and community conservancies in Namibia: Co-managing land for game farming and wildlife-related livelihoods (adapted from Jones, 2003)

About 75 percent of Namibia's wildlife lies outside formally state-run protected areas. Private farms developed a multi-million Euro industry, based on consumptive and non-consumptive uses of wildlife. But individual farm units are not large enough for successful game farming, which requires large areas that take opportunistic advantage of pasture growth and water supply in arid and unpredictable environments.

Mobility and flexibility are the keys to survival. Private farmers soon realized the advantages of pooling their land and resources to manage wildlife collectively, and established "conservancies" with common operating rules, management plans and criteria for the distribution of income derived from wildlife. There are now at least 24 conservancies on private land in Namibia (compared to only 12 in 1998) covering an area of close to four million hectares. Efficiency of scale means that their returns are more than twice those of individual wildlife ranches. Namibian communities have followed suit. There are now also 15 "community conservancies" in Namibia, managing another 4 million hectares of land, with more than 200,000 wild animals, including endangered black rhino, endemic species such as Hartmann's mountain zebra, and large parts of Namibia's elephant population. Important habitats managed by community conservancies include the western escarpment of the central plateau – a major centre of endemism, seasonal and permanent wetlands, northern broad-leafed woodlands, and west-flowing rivers, which form linear oases in the Namib Desert. Several community conservancies have set some of their land aside as core wildlife and tourism areas within broader land use plans, and wildlife has been reintroduced to at least three such conservancies. Torra, a community conservancy with more than 350,000 hectares in north-western Namibia, has one up-market tourism lodge that generates about EUR 50,000 annually. Trophy hunting is worth nearly EUR 18,000 annually and a recent sale of Springbok raised EUR 13,000. The size of the conservancy means that it could certainly develop two more lodges without causing environmental damage or spoiling the wilderness experience for tourists. This would more than double the existing income, making considerably more money available to the 120 households living in the region.

Genetic resources

Genetic resources refer to the wealth of genetic material – and characteristics – within species. This includes wild as well as domesticated species.

Crop and animal diversity: The genetic resources of plants and animals are crucial to feeding the world's population, and are the raw material that farmers and plant breeders use to improve the quality and productivity of their crops. In human history, 40,000-100,000 plant species have been regularly used for food and fibres, as well as other industrial, cultural and medicinal purposes (Bioversity International, website). Over the last 500 years, about 30 crop species have become intensively and widely used and are now the basis of much of the world's agriculture. Despite the diversity of crops, three species – rice, maize and wheat – contribute nearly 60 percent of the calories and proteins obtained by humans from plants today. However, at least 7,000 cultivated species continue to be used today around the world, mostly on a small scale in subsistence agricultural systems. Farm animal diversity refers to the approximately 40 species of animals (including approximately 10,000 breeds or strains) that have been domesticated or semi-domesticated in the past 12,000 years, contributing to agricultural production. Animal diversity also covers aquatic animals.

Wild diversity: Additionally, wild and semi-domesticated diversity in and around farmers' fields as well as, for example in forests contribute to food security, and around 20,000 species are used for medicines.

Developing countries are the main source of genetic diversity – both wild and domesticated – on earth and thus providers of much raw material, whereas most large-scale, industrial enterprises based on use and development of genetic resources (pharmaceutical, seed companies, cosmetics, etc.) are based in developed countries.

Rights related to genetic resources are a specific case of rights related to biodiversity in its broader sense, and likewise, strongly associated to rights to land and water. However, considerable erosion of genetic diversity has taken, and is taking place, mainly due to modern industrial agriculture, through the replacement of local varieties by improved or exotic varieties. The decline in genetic diversity makes crops more vulnerable to pests and diseases as well as climatic variations, and has serious implications for long-term sustainability in the food system.

Types of rights and tenure systems

Genetic resources were traditionally regarded as “a common heritage of mankind,” with open access for anybody to use and develop. Farmers were freely allowed to use, save and replant plant material. Researchers had free access to collecting specimens. However, when genetic material increasingly became patented or subject to other intellectual property regimes (IPRs), developing countries responded by arguing that genetic resources should be subject to national sovereignty in order to create a formalised basis for profit sharing linked to these resources.

Individual/private rights: Patents and other intellectual property rights: Applying patents to living organisms as such has only very recently been allowed in most developed countries. Starting in the USA in the 1980s, it is still a heated area of debate. Under the WTO Trade-Related Aspects of Intellectual Property Rights (TRIPS), countries are required to apply for some form of protection, either through patents or a *sui generis*³ system for plant varieties. However, plants and animals, and essentially the biological processes that produce them (except for micro-organisms) may be excluded from patentability. Under bilateral trade agreements (mainly initiated by the USA and partly by the EU), developing countries may be asked to implement “TRIPS plus” provisions that extend intellectual property rights further into a wider area of protectable matter than do “standard” TRIPS requirements.

The International Union for the Protection of New Varieties of Plants (UPOV; from 1961, last updated 1991) aims to protect the rights of plant breeders and encourage breeders to develop new plant varieties. The UN World Intellectual Property Organisation’s (WIPO) Intergovernmental Committee on Intellectual Property, Genetic Resources, Traditional Knowledge and Folklore (IGC) was established by the WIPO General Assembly in October 2000 as an international forum for debate, dialogue and negotiations concerning the interplay between intellectual property, traditional knowledge, genetic resources and traditional cultural expressions.

³ *Sui generis* is a (post) Latin expression, literally meaning of its own kind/genus or unique in its characteristics.

Box 8. Farmers Rights in Practice: Examples from Community Biodiversity Development and Conservation Network in South-East Asia

Under the Community Biodiversity Development and Conservation Network, farmers in Thailand, Vietnam, Lao PDR, Bhutan and the Philippines, are undertaking rice breeding and selection. There are now farmer-developed varieties that are red, sticky, aromatic, and suitable for acid sulphate soil, alkaline soil, prime irrigated areas, marginal uplands and much more.

In addition to the ongoing exercise of their customary rights to conserve, to develop, to exchange and to sell seeds, farmers are improving market access with support from other stakeholders.

In Vietnam, local authorities are supporting farmers to access broader markets. By law, farmers cannot trade or sell seeds across provinces if the seeds are not certified. Government authorities in the CBDC project areas include farmer-developed seeds in their formal distribution system. This is possible largely because of the expanding use and popularity of farmer-developed seeds. In other cases, local authorities issue local certification to enable localized trading and exchange.

This is part of the preparation for the opening up of the rice industry (and seed sector) to liberalized trade. By strengthening farmers' capacities to conserve, develop, exchange and sell their seeds, they will have their alternatives with the opening up of the market and can at least secure their seed needs on their own.

In the policy arena, the articulation of farmers' rights varies with the political-economic context in each country. In the Philippines, farmers have set up community registry systems as part of their political expression against the national Plant Variety Protection Act, which they mean impedes farmers' rights. The idea is to put the information in the public domain with an explicit declaration that no intellectual property rights will be applied to these materials, derivatives or associated knowledge.

Despite these successes, there is general agreement among stakeholders in the CBDC programme that farmers' rights are threatened and that international developments and trends are unfavourable. Most national policies (seed laws and Plant Variety Protection laws) failed to consider farmers' rights when they were drafted. There is also agreement on the need to raise awareness and discussions about farmers' rights.

National sovereignty: National sovereignty over biological resources was a key demand by developing countries when the Convention on Biological Diversity (CBD) was negotiated. The concept constitutes one of the basic premises of the CBD (ratified in 1993). In the CBD, a "genetic resource" is defined as "genetic material of actual or potential value."

Based on the CBD, some 25 developing countries have so far introduced access legislation related to genetic resources and associated knowledge, no longer making it possible to freely collect genetic resources anywhere in the world. Voluntary Guidelines on Access & Benefit Sharing (ABS) were adopted by the 6th Conference of the Parties to the CBD in 2002. A protocol for an international regime on ABS is presently under negotiation, with the aim of finalisation by 2010.

A global "tenure regime" for food crops: Recognizing that open exchange of plant material and research on crop development are critical to improving the quality and productivity of crops, and that this depends on international cooperation (since all countries depend on crops and the genetic diversity within these crops from other countries and regions), the FAO Conference adopted the International Treaty on Plant Genetic Resources for Food and Agriculture in 2001 (FAO-ITPGRFA). The Treaty aims to

ensure the continued availability of plant genetic resources that countries will need to feed their people. Through it, countries have agreed to establish a multilateral system that applies to 64 major crops and forages in order to facilitate access to plant genetic resources for food and agriculture, and to share the benefits in a fair and equitable manner.

Common property (Farmers' Rights): The traditional right of farmers to save, reuse, exchange, and sell seed from their own harvests is enshrined in the concept of farmers' rights, as a recognition of farmers' collective efforts in plant breeding through the millennia. This has created the current diversity in crops and varieties. Furthermore, farmers' rights are still the backbone of food security for many small-scale farmers in developing countries, as saving their own seed, enhancing the crops through their own selections and exchanging seeds with other farmers remain the main source of seeds for many poor farmers.

Farmers' rights are officially recognized in the FAO-ITPGRFA, although actual interpretation is left to national legislation.

In implementing obligations under TRIPS, developing countries may choose to introduce an alternative *sui generis* system to protect plant varieties and farmers' rights. In UPOV's latest update from 1991, farm-saved seed is no longer automatically allowed. However, as an optional exception, a government may legalize seed saving for the farmer's own use.

Particular issues and areas of debate related to tenure

Multiple fora – multiple stakeholders

The issue of “tenure” (or Access and Benefit Sharing, ABS, and Intellectual Property Rights, as the more common terminology is in this context) related to genetic resources and associated knowledge is dealt with in several overlapping international fora and processes, such as the WTO-TRIPS, the CBD⁴, WIPO-IGC, and the UN Permanent Forum on Indigenous Issues, to name a few of the debate's main arenas. The issues are complex and include many stakeholders with different interests, both formal parties, such as developed and developing countries, as well as other key stakeholders. These include industry, scientific institutions, development and environmental NGOs, and representatives from indigenous and local communities. As negotiations are ongoing in several fora, it is difficult to get a full overview and progress is slow. Thus, the cluster of negotiations are creating confusion and overlapping work. Some of the issues under debate include:

- Industry and breeders lobby for strong property rights regimes to be maintained and further developed, and for as free access as possible for bioprospecting.
- Developing countries are pushing for a legally-binding international ABS regime and a mandatory system of disclosure of origin in patent applications.
- Indigenous peoples and local communities are largely against the notion of “patents on life” and in favour of acknowledgement of their rights as holders of traditional knowledge.
- Researchers are experiencing increasing restrictions in accessing genetic material and associated knowledge from IPR systems, as well as national ABS regulations.

⁴ The CBD Ad Hoc Open-Ended Working Group on Access and Benefit-sharing

Rights of indigenous and local communities

Farmers and local communities are key knowledge holders of genetic resources and are heavily affected by the international and national legal frameworks that regulate access, use and benefit sharing related to genetic resources. Interests and priorities of indigenous and local communities may, in many cases, also differ from both state and private interests.

There are also growing concerns that farmers' rights are under threat, and that this will affect food security. Most national policies (seed laws and plant variety protection laws) fail to pay proper attention to securing farmers' rights when drafted, due to pressure from the seed industry and even industrialized countries negotiating bilateral agreements with developing countries.

Increased corporate control, weakened public systems and access to genetic resources for research

Loss of genetic diversity as well as the expansion of property rights regulating genetic resources and related knowledge have been accompanied by a rapid concentration of the seed industry, where a handful of transnational companies control an increasing part of daily global seed production and distribution.

Another important, and interrelated, factor is the public sector's abdication of involvement in plant breeding and providing certified seed. In many countries, and particularly in Africa, the public seed supply system has been weakened, with severe effects for farmers, and highlighting the importance and role of farmers' traditional right to control seeds from their own harvests.

Another important issue is the limitations and bureaucratic procedures surrounding access to genetic resources faced by many researchers at the national and international levels as a consequence of national access legislation and intellectual property regulations. The FAO-ITPGRFA is, in this respect, an important initiative that, for example, aims to facilitate access to genetic resources for food and agriculture. The Consultative Group on International Agricultural Research (CGIAR) also strives to negotiate new private/public partnerships as a means to access proprietary technologies for public use through segmented markets, humanitarian use, etc.

Biopiracy

Biopiracy refers to the appropriation of genetic resources and the related traditional knowledge of farming and indigenous communities by individuals or institutions who seek exclusive monopoly control (patents or intellectual property) over these resources and knowledge, without proper agreements with its developers (concerning domesticated materials), and/or without proper consent by relevant indigenous and local communities and government authorities, as mandated by the Convention on Biological Diversity (mainly concerning wild material). Two key issues include: The information that examiners are required to consider when checking for novelty. For example, under US patent law, there is, in principle, no requirement to check non-written sources outside the USA. This means that traditional use anywhere else in the world that is not documented in writing, does not formally constitute prior art.

The drawing of the boundary between invention and discovery, especially when the subject matter of a patent is a biological substance found in nature, such as a DNA sequence or a cell line is difficult, and the dividing line tends to be blurred. A number of biopiracy cases involve

this type of material, collected from developing countries and subsequently patented in developed countries.

Box 9. The case of the enola bean

The Enola bean patent (USA patent number 5.894.079) was issued in 1999. Proctor, the patent holder, originally bought a bag of commercial beans in Mexico, planted them in Colorado [USA], and did several years of selection. Not long after that, and supported by a USA patent and a plant breeder's rights certificate, Proctor claimed that Mexican farmers were infringing on his monopoly by selling yellow beans in the USA. Shipments of yellow beans were stopped at the Mexican-US border, and Mexican farmers lost a good market. Proctor also filed lawsuits against seed companies and farmers in the USA, claiming that they infringed on his monopoly rights for selling or growing yellow beans from Mexico.

The patented Enola bean is genetically identical to a pre-existing Mexican bean variety that has traditionally been bred and developed by indigenous peoples in Mexico, but which has also been cultivated in the USA.

The NGO ETC Group discovered the Enola bean patent in 1999 and demanded that the patent should be legally challenged and revoked. FAO and the Consultative Group on International Agricultural Research (CGIAR) investigated the patent as a likely violation of their 1994 trust agreement that obliges them to keep designated crop germplasm in the public domain and off limits to intellectual property claims. As a result, the Colombia-based International Center for Tropical Agriculture (CIAT; a CGIAR Institute), with support from FAO, filed an official challenge of the Enola bean patent at the US Patent and Trademark Office (PTO) in 2000.

In 2005, the US-PTO released its "final rejection" of all 64 claims of the patent. However, Proctor was given a six-month period to prepare and file a request to extend the re-examination period. In October 2005, Proctor filed the request and won a three-month reprieve. US-PTO thereafter issued another "final" rejection in response to Proctor's amendments at the end of 2005. Proctor could file for one more extension after this. The latest news in March 2007 is that Proctor filed a new appeal of the PTO's decision to reject all claims of the Enola bean patent. The case is going to the Board of Patent Appeals and Interferences. Even though this case will receive priority, the judge probably won't make a decision for at least six months. In the meantime, Mexican and US farmers affected by the Enola bean patent will suffer and the patent system has no mechanism to compensate those victimized by patent abuse.

Biotechnology and GMOs

Agro-biotechnology, broadly defined, refers to any technique that uses living organisms or substances from these organisms to analyze and modify plants, animals and organic products, and produce new ones. Whereas most biotechnologies are commonly used and well accepted, intense debates are taking place, with polarized opinions, both in the industrialized and developing world, about the balance between risks and benefits associated with the introduction of genetic engineering and GM crops. A common concern related to "tenure" and shared between many proponents and those doubting the use of GM crops, is linked to the control and ownership of genetic resources. There are particular concerns relating to GM crops, as virtually all GM crops on the market are patented, and farmers (subject to national legislation) may not be allowed to save the seed. The germ plasm will even be restricted for breeding by other breeders. GM technology per se could also be applicable as a means of "inbuilt patenting" in seeds.

The Genetic Use Restriction Technologies (GURTs) is a term used to describe different forms of controlling the action of genes in plants. A specific case of this is the V-GURTS – better known as “Terminator Technology” – that results in seed sterility, with the main objective being to discourage farmers from saving their seeds. Such technology, which explicitly limits farmers’ access to and control over seeds, could have severe implications for food security if the technology is generally used in developing countries, or sterile seed is sowed by accident for example after being distributed for purposes such as food aid.

Animal genetic resources

Animal genetic diversity (compared to crop genetic diversity) has received very little attention. After the adoption of the ITPGRFA by FAO member states (see above) however, a similar process was initiated for animal genetic resources that is hoped to increase awareness about its importance. Some particular tenure-related concerns regarding animal genetic resources include:

- Restrictions regarding traditional grazing activities of pastoralists, resulting from the conversion of land use (e.g. establishment of protected areas, biodiesel cultivation, land-grabbing, sedentarization of pastoralists, etc.), means that many pastoralists give up keeping animals, which, in turn, threatens the survival of many unique livestock breeds (see chapter on Rangelands).
- The right to keep animals is jeopardized in the wake of pandemics, and especially the Avian Influenza. In many countries, small-scale poultry keepers are not allowed to keep their traditional poultry in the vicinity of industrial chicken complexes. Biosecurity requirements eliminate small farmers from the livestock business. The rights to sell animals and their products across national boundaries have also become more limited, due to sometimes inappropriate animal hygiene regulations. Developing countries are being forced out of international markets and big players are entering.
- The right of livestock keepers to use and develop their own breeding stock and breeding practices may also be increasingly limited in the future by patenting.

Petroleum and minerals

Many developing countries are heavily dependent on income from various sorts of high-value, extractive industries such as petroleum and mining. These commodities are often politically sensitive and require very large investments. Extracting operations are often associated with social and environmental impacts, including the expropriation of land and other resources. Appropriate arrangements are needed to maximize the benefits and minimize the costs of these operations for local resource users.

In most countries, ownership of these resources is vested in the state. Countries with such resources may lack the capital and technology to exploit them and therefore need foreign direct investments. Resource development is normally undertaken by private operators – often foreign multinational companies – on the basis of agreements or licences with the state. If appropriate conditions are not in place, investments based on natural resources may undermine the ability of local communities to access the resources on which they depend for their survival. This may take the form of expropriation of community lands without adequate compensation. Investors may also be granted exploitation rights that

severely affect the ability of the local community to use the resources. The balance of bargaining power between local resource users and outside investors may be even more profoundly affected by the involvement of foreign capital in capital-poor countries.

Many developing countries have provided special guarantees for foreign investment through signing investment treaties, passing domestic, investor-friendly reforms and establishing specialised governmental agencies. In some cases, the state has ceded important sovereign powers and economic rights to the private operators, virtually creating a state within a state.

Extracting operations often lack transparency in the flow of revenues from oil and mining companies to developing countries. This can hide gross corruption and waste of these resources, contributing to political instability and even violent upheaval.

Initiatives, such as the Kimberley Process, which aims to prevent diamond resources from being used to fund conflict activities, and the Extractive Industries Transparency Initiative (EITI), which aims to increase the transparency of payments and revenues in the extractive sectors, are two examples of recent positive developments.

Conclusion

While natural resource tenure includes rights over land, it encompasses other natural resources as well. The property may be farm land, grazing land, forest land, a river, a fishery, wildlife, or some other resource, including minerals. Each of these resources has particular physical qualities and technical constraints concerning its use, yet it fits into an integrated ecosystem. The above assessment has shown that natural resource tenure is inherently complex. Incomplete understanding, and ignorance or disregard for fundamental complexities can lead to wrong policy prescriptions and ultimately, to conflict about resources.

Given the fundamental complexities, blanket prescriptions and approaches to natural resource reform are destined to fail and lead to conflict. A more country-grounded approach to analysis of main resource tenure policy issues and strategically focused interventions is needed. Beyond generic principles, there are no universally applicable approaches or solutions. Titling and the formalization of land rights can be important in specific urban, peri-urban and other high population areas, especially where land markets are active and where titles are already a dominant form of tenure and in demand by the poor. Tenure formalization processes require careful prioritization and integration into local contexts. No single tenure options can solve all problems. Policies on land as well as tenure and property rights can reconcile social and economic needs by encouraging a diverse range of options, adapting and expanding existing systems when possible, and introducing new ones selectively.

The complexity of natural resource tenure reform requires an integrated approach. Lack of appropriate information and coordination among government departments can lead to different institutions issuing concessions and rights to the same piece of land, most likely without consulting the local people whose ancestral territory and livelihoods might be affected. With better administrative systems in place – including procedures for integrated planning as well as participatory, environmental and social impact assessments – “messy” situations could be prevented.

Failure to meaningfully consult and include full and informed participation of communities whose resources, livelihoods, and cultural identities might be affected by the outcomes of decisionmaking – whether through policies or projects – is a key catalyst for conflict. There is increasing recognition that centralized, top-down decision-making about land and natural resources not only creates social conflict but also fails to take into consideration local knowledge that could help avert ecological catastrophe.

It is important to ensure that the policies and practice in resource administration for operations at the country level will fully incorporate the principles of subsidiarity – decentralized recognition of customary tenure and the governance of the commons – as opposed to the continuation of technically-driven programmes for systematic registration and titling.

The balance has decisively shifted in favour of legal recognition and positive treatment of customary tenure arrangements. However, a more nuanced understanding of customary tenure is needed. In addition to legal recognition, customary rights need to be supported by institutional arrangements involving customary authorities and local democratic structures backed and regulated by the state.

The importance of secure communal property rights and access (e.g. rangelands and forest resources, protected areas and biodiversity) needs to be stressed because of the significance of the commons for livelihoods, food security, vulnerable groups and environmental quality. Land policy and land administration systems must cater to the commons and provide for decentralized governance, through the recognition of group and multi-stakeholder rights and management arrangements.

The importance of attention to resource policy and resource access for poverty reduction needs to be fully articulated and land/resources require more emphasis in Poverty Reduction Strategies, given the importance of natural resources for economic and social development, good governance and environmental sustainability.

6. The role of Sida in resource tenure

What can Sida do?

Sida plays an important role in cooperating with partners in developing countries in assessing and implementing the full potential of a pro-poor and human rights approach to resource tenure. In doing so, as a general principle, Sida may acknowledge that tackling the challenges of resource tenure reform is a long-term process, which requires long-term and ongoing commitment. Significant harm may result from short-term interventions. Resource tenure reform needs to be driven and owned locally and Sida may recognize that while lessons of good practice can be shared, the highly diverse history, environment and cultures of different nations demand that approaches to resource tenure are tailored to local circumstances and that there is no one-size-fits-all solution. Sida may therefore emphasize country ownership, show sensitivity to the local context and call for an understanding of the background (and historical) context of land/resource policy and administration.

Sida may address natural resource tenure at different levels. Six entry points are described below:

- actions within the framework of poverty reduction strategies (PRS), budget support, and sector-wide approaches
- actions in projects/programmes that are not primarily resource tenure related
- actions in projects/programmes that mainly address natural resource tenure
- actions related to specific groups
- actions related to specific resources.

1. **Actions within the framework of PRS, budget support and a sector-wide approach**

Poverty reduction strategies provide a key opportunity for Sida to address natural resource tenure in the wider context of poverty. Joint donor sector-wide approaches at the country level are also making progress amongst donors and, in some cases, involve multilateral agencies in issues such as agriculture, natural resources and land governance. Given the need for coherence and a reduction of transaction costs involved in a multiplicity of small projects, budget support to governments is increasingly attractive. Sida may work with governments committed to poverty reduction that address resource tenure issues in the context of poverty

reduction strategy processes, sector-wide approaches and budget support. Any decision to do so – and the modalities, scope and scale of support – will be determined through dialogue concerning country-assistance planning processes. Issues that might be tackled include unclear resource tenure, tenure insecurity among vulnerable social groups (the poor, women, ethnic minorities), resource tenure-related conflict, resource tenure hindrance to pro-poor growth and the impact of climate change on tenure security.

2. Programmes/projects not primarily NRT

Sida may introduce natural resource access as an issue in programmes and projects that are not primarily tenure-related, both in rural and urban development programmes, and programmes focusing on democratic governance or peace and security. Through its interventions, Sida may actively ask its partners about their handling of natural resource tenure and governance issues. The answers to these questions may open a dialogue and identify issues to be addressed, either within the same programme or within a new programme addressing this particular issue.

3. Projects/programmes primarily addressing NRT

Pro-poor policy formulation

Sida may continue its involvement with processes of land/resource policy formulation in developing countries, so as to put pro-poor policies in place. Programming activities may depend on specific opportunities and needs of the country in question. The following support may be offered:

Support to the formulation of a comprehensive, inclusive and transparent national land resource policy upon which land tenure reforms are based. Improved resource laws and regulations are needed to establish secure rules for property use and ownership, including the protection of fragile lands and the creation of national forests and parks. Improved resource policy and administration impacts positively on peri-urban and urban areas as well, where secure access to a house plot can represent the foundation for expanded livelihood options.

Support efforts assuring that a sufficient and consistent level of participation of all relevant stakeholders is established, and in particular, for the rural and urban poor without a voice. Sida may actively promote the rights of the poor, such as popular organizations, indigenous communities, peasants, pastoralists and women to fully participate in the formulation, implementation and enforcement of policies.

Support in preparing pro-poor land policy for new functions of land – e.g. the protection of biodiversity, climate, water retention, leisure, tourism – and acknowledge the critical role the rural poor may play in this context.

Support to research for pro-poor land reform. There is a considerable body of recent ongoing research into different aspects of land policy and land reform. Sida may promote the effective use of the knowledge which research generates in operationalising land policy for pro-poor development. In doing so, Sida may use different mechanisms: dissemination of research findings through media to target different audiences, development of learning resources and training programmes with partner organizations, development of policy recommendations, implementation and institutional development at local, national and regional levels, and establishment of participatory learning groups and citizen juries on land policy in key countries.

Making an effective contribution to improved policy and its implementation requires working within the policy process and creating feedback mechanisms for learning. Sida may encourage thinking, research and debate in a two-way, micro-macro linkage from policy to the local level and vice versa. This may require more than policy research by central departments or the international community. Development of new ideas can only happen on the ground, supported by regional and international lesson learning. Sida may provide support to develop local capacity and strengthen universities through support to local research, skill-training education and professional development.

Implementation of pro-poor tenure reforms

Once the pro-poor land/resource policy is in place at the national level, addressing implementation issues is of importance. The implementation of pro-poor tenure reforms is a highly complex issue and an immense challenge. How can tenure regimes be designed so they enhance the livelihoods of people in areas of customary tenure? How can tenure-related laws and regulations be harmonized and how can insecure tenure be upgraded? Once land/resource laws have been passed, implementation and full operationalisation take a long time. Sida may help speed up policy implementation. It may do so by giving support to:

- building capacity of public-sector land institutions
- working with NGOs and civil society groups
- sharing knowledge

1. Building capacity of public sector and land institutions

Land policy reform is unlikely to have significant poverty-reducing effects unless sufficient institutional capacity is in place. In many developing countries, the land administration infrastructure is weak and, in almost all cases, land reform involves strengthening and rehabilitating land institutions or developing new ones. Institutional capacity building and the supply of information technology are often linked to land registration and titling programmes through donors. Capacity building has frequently been decoupled from effective land policy and planning reform, and from the establishment of appropriate institutions for land administration and management, thus failing to deliver real benefits. Sida may in particular support governmental capacity building by providing the necessary information to develop a coherent, cost-effective and responsive plan for implementing land/resource legislation. Capacity building requires much time and considerable funding. Long-term projects and programme cycles, as well as sufficient funding are needed to make this choice of intervention work.

Sida may help provide technical support for a range of services, including land administration. Outdated, inefficient and incomplete land registers generate conflicting claims and fuel disputes. Simple methods to bring together existing records and make them open to public scrutiny are key to establishing transparent and accountable management of land and property rights. There is little doubt that new tools and technologies, such as computerized land registries, comprehensive land information systems and GPS enable rapid, inexpensive and highly accurate land surveillance. However, while the supply of advanced technology can assist in building capacity for resource reform and better resource administration, its application may not ensure delivery of social and economic benefits. Technology cannot address the fundamental social and cultural issues that pertain to any transformation of land rights; these

situations must therefore be handled with caution. It is also important to recognize that new tools and technologies can become additional instruments in local politics and power relations, especially if only controlled (or understood) by educated and literate elites. Nonetheless, there is scope for new administrative tools and technologies to contribute to pro-poor reforms of land administration systems, particularly when these are appropriately designed through the collaborative effort of policy-makers and technical specialists.

2. Strengthen work of NGOs/civil society organizations

Natural resources management is a realm of serious political power as it involves crucial economic and livelihood decisions. An important challenge is how best to develop inclusive and conflict-free resource management interventions. NGOs and civil society organizations can play an important role in providing checks and balances on government decisionmaking and resource policy implementation.

The effectiveness of civil society in assisting the poor to pursue their land claims, gain access to and make effective use of land is contingent on the political environment of each country. Where there is limited political room for manoeuvring, social mobilization is likely to lead to a coercive response. On the other hand, if a permissive environment prevails, there is scope for civil society to play a more active role in influencing policy.

It is also important to remember that NGOs and civil society are, by their very nature, composed of many elements that may have competing interests and constituents. Supporting them is therefore not a neutral process and may lead to the emergence of new actors and organizations that merely adapt to existing, deeply rooted (and not pro-poor) social institutions and values. It is therefore important that:

Civil society should not be considered as an autonomous sphere which should be strengthened to put pressure on the state, but as a collection of interest groups that are in and of themselves reliant on having effective state institutions in place, and which form and reform in response to state action – and inaction. In turn, the ability to aggregate interests and channel them through representative institutions is an essential ingredient in creating state capacity to respond.

A set of new land reform networks and coalitions now exists. These offer multiple approaches, from direct support and resource reform movements, to making room in international fora and the donor community to discuss and seek action on land reform. Examples of such networks include The Association for Land Reform and Development (ALRD) in Bangladesh, the Asian NGO Coalition for Agrarian Reform and Rural development (ANGOC), and the Popular Coalition to Eradicate Hunger and Poverty. This coalition includes IFAD, FAO, WFP, the World Bank, the European Commission and civil society networks from all the regions. The growth of local, national and international NGOs and other forms of civil society has brought about an opportunity for greater effective mobilization of the poor and the basis for effective democratic development in many countries in the long term.

Sida may work closely with these local, national and international NGOs and other forms of civil society to strengthen their efforts towards more effective mobilization and creation of opportunities that help redress the lack of economic and political power with which those poor in resources are faced. It may build citizen capacity through expanding knowledge about new laws and providing opportunities to acquire and safeguard resource rights.

3. Sharing knowledge: lesson learning

Given the emerging need to strengthen regional capacity and the need for expertise among governments engaged in land issues, Sida can promote lesson learning. Some donors are doing this: DFID provides support to regional networks as platforms for debate and learning amongst different stakeholders in response to demands from land tenure practitioners in Africa. FAO's Land tenure Service has a mandate to provide technical assistance and information services to the governments of developing countries.

There now exists a body of sound, innovative local practices upon which to build new institutional innovations. Examples of this include public/private partnerships in urban housing, linking customary and formal systems, strengthening local conflict and dispute resolution mechanisms, new forms of land leasing and promotion of rental markets and slum upgrading. In this respect, Sida may facilitate south-south cooperation and the sharing of knowledge and information.

4. Resource tenure for specific groups

Women, indigenous peoples and pastoralists have been identified as particularly affected by the current tenure of resources or by the consequences of the modernization of resource tenure.

Women

A number of initiatives have been undertaken to strengthen resource rights for women, through revision of constitutions and land laws to provide equal property rights for men and women. These legal provisions do not necessarily translate into de facto changes in customary land practices or local bureaucratic decisionmaking. Women continue to be denied access to resources through legal, bureaucratic and customary inheritance practices in many countries. Until social norms and practices that discriminate against women have been eradicated, implementing equal opportunity may well require affirmative action.

Women's rights require strengthening in both formal and informal tenure systems. Constitutional and inheritance laws also have a role to play alongside land law and institutions. The main legal requirements involve establishing women's right to own property and the recognition of the principle of spousal co-ownership of land. In addition to establishing the constitutional principle of women's rights to own property, the laws and regulations governing the implementation of land registration and resettlement programmes should ensure that women's land rights are fully recognized and included. Sida may help to identify and redress gender imbalances. It may actively support equality of access to land and asset-based development for both sexes.

Inheritance practices often determine women's actual entitlements to land, regardless of whether surviving female spouses and daughters are allowed to inherit land, or whether their rights are circumscribed by those of male relatives. Customary rights often discriminate against women, and in particular widows and female orphans. Often there is no independent security system for them, when land falls back to the husband's lineage. Sida may focus attention on the needs for reform of inheritance laws.

HIV/AIDS exacerbates even further women's limited options to access land securely. Sida may support the development of mechanisms to strengthen women's positions and to prevent forced eviction of widows from land after their husbands have died from HIV/AIDS without disrupting the existing social fabric.

Sida may support the development of incentives for traditional authorities to protect widows' and orphans' access to land.

Indigenous and tribal peoples

Indigenous and tribal peoples are affected by the changes that are 'modernizing' the resource tenure for land, water and forests as well as by the biopiracy of genetic resources. Sida may support indigenous and tribal peoples in gaining recognition of their tenure system. This requires careful analysis that explicitly considers indigenous as well as formal tenure regimes, and inheritance and family laws, with special attention given to the rights of indigenous peoples.

Sida may help to acknowledge that these peoples are often the most important users of the resources and key actors for the protection of those resources.

Pastoralists

Pastoralist nomads are traditional users of various resources (land, water, forest) without claiming the rights to one location. Changes in land use and tenure administration lead to the increased exclusion and marginalization of these groups.

Rangelands (semi-arid/arid) are often not fertile enough to support agricultural production (i.e. non-irrigated due to factors such as salinisation and lack of secure water). Thus, livestock (or wildlife or camels; i.e. animals best suited for the particular environment) grazing is the most optimal and productive choice. Allowing sufficient land so that movement between grazing lands is viable is often the most effective way to optimize resource use.

Sida may therefore support processes for a secured tenure for pastoralists in rangelands.

Rather than transform tenure of grazing land, programmes may be more about managing grazing land. Tenure reform measures for communal land should underpin the adaptability and responsiveness of existing customary systems, without constraining local coping strategies.

5. Different areas of resource tenure

Agricultural land

Large numbers of a developing country's poorest live in rural areas and depend upon secure access to and the productive use of land for their livelihoods. Sida may offer support to reforms providing tenure security and clear property rights to small farmers. Land tenure security has been approached by comprehensive land registration and titling. Titling has proven to be costly, long-term, poorly prioritized and poorly integrated into local contexts. Under appropriate conditions, Sida may support titling. But no single tenure option solves all problems. Sida may encourage a diverse range of options, adapting and expanding existing systems when possible, and introducing new ones selectively.

When ownership of land is inequitable, land redistribution for the poor is politically complex and contentious. Much opposition from land owners and vested political interests may arise and successful land reform requires a long-term commitment from both the government and civil society. Where there is broad consensus in society and political resolve, Sida may support the improvement of land distribution. In areas characterized by weak political commitment, Sida may support a range of policy alternatives that do not require full-blown land redistribution in order to improve land distribution and secure access to land for the rural poor.

Subsequent to the redistribution or restitution of land to original land-owners, the consolidation of fragmented farm plots into commercially viable holdings has become an important issue today. Sida may support decollectivisation and farm restructuring, using new models of land privatization and farm-restructuring mechanisms.

Land and water reform

For the poor, securing access to land and water is a key element of both survival and livelihood strategies. While many reforms seek to strengthen the poor's land tenure rights, the relationship between water rights, poverty and livelihoods is less clear. Reducing poverty is rarely a priority of water rights reform (exception: South Africa). Sida may work to overcome this by providing more information about how the absence of individual water rights constrains poverty alleviation.

Sida may address the question of securing rights for water user associations and individual irrigators. Unless this issue is addressed, community-based irrigation management is unlikely to succeed. The impact of land tenure regimes on community-based irrigation management needs to be more clearly understood. Sida may support the clarification of this issue.

Sida may support countries attempting land and water reform in improving their knowledge base and access to information as well as identifying a development path that avoids marginalization of the poor and damage to the environment. The key question is whether the current trend towards a European model of separate land tenure and water rights systems provides the solution. Sida may support a critical analysis on whether this trend is suitable to the conditions of developing countries.

Even though current land tenure and water rights reform are taking place in parallel in some countries (for example in Kenya), and officials involved in the two processes are at least consulting one other, much of the discussion about reintegrating land and water rights has started with and has focused on state law and institutions.

Sida may support underlining the usefulness and importance of examining how land and water rights and management have been linked in a range of customary institutions. Sida may then seek to identify principles upon which appropriate land and water rights linkages may be constructed, and particularly so at the user level.

Wetland/coastal resources

The significance of wetlands and coastal resources for the poor and their potential to alleviate poverty are rarely acknowledged in national policies. A stronger pro-poor focus of policies and programmes in these two sectors is necessary. Strengthening the capacity of national and regional institutions to enforce effective tenure policies for coastal fishery resources is also necessary. Sida may support increased integration of the two sectors as well as increased targeting of the fishery sector in national poverty alleviation strategies.

Customary tenure systems are relatively common along coasts and in wetlands. Systems perceived as legitimate by local resource users must be better understood by policymakers and recognized by national policy. Sida may support capacity building among local communities and indigenous peoples, and may promote legislation and trends formalizing and securing customary and common rights to wetlands and coastal resources for local livelihoods, including ensuring equal access rights for women and men.

In cases where wetlands are managed as common property resources, privatisation or state appropriation may lead to unsustainable utilisation, resource grabbing or undesirable changes in resource use. Sida may support traditional common property management systems, including the ability of the system to evolve and adjust to changing circumstances.

Urban land

Great progress has been made in addressing the issue of urban land tenure and new innovative approaches are available that seek to increase security and provide access to available services and credit.

Sida may support these approaches to strengthen the rights of squatters and slum dwellers; instead of forced evictions, negotiated solutions may be enabled.

Sida may support phased approaches in interventions to upgrade the rights of the poor over time. It can support tenure policies that have the assurance of protection for all households from forced eviction as their primary objective. This need not involve public sector agencies losing long-term control, or private landowners losing their land, but people being given due notice and reasonable options for alternative accommodation.

Sida may also support interventions that involve improved access to livelihood services and credit – normally in this order.

Sida may work closely with UN-HABITAT, on its global campaign for secure tenure, based on developing processes of negotiation as an alternative to forced evictions. UN-HABITAT is also building a cross-functional network of land and housing professionals, academics, bureaucrats and NGOs to highlight and share innovations so as to scale up and change attitudes and behaviours within governments; this includes attempting to cross sectoral boundaries – for instance, through work with an international surveyors' association on pro-poor appropriate technologies about to be piloted in Kenya.

Rangelands

While nomads and indigenous groups rarely own their land, they do own their livestock. However, inappropriate tenure policies are major contributors to the degradation of arid/semi-arid grazing systems; when grazing areas are reduced or animal movements restricted, overgrazing becomes a problem. A huge literature is virtually in total agreement that the world's grazing lands are the most degraded lands on earth. Yet, donors seldom prioritize these issues.

Sida may encourage the sustainable and productive management of rangelands that ensure the customary rights and lifestyles of pastoralists and small-scale livestock keepers.

Forests

The local use of forests is often invisible to outside observers but may be crucial for the poor or other vulnerable groups that derive a significant proportion of their household income or subsistence from the forest. Formalised, customary and/or collective rights to natural forests for local livelihoods increases access security for the poor. Besides being a rights issue, there is also evidence that local communities, with secure tenure rights, can manage forests sustainably.

Sida may support capacity building among local communities and indigenous peoples, and may promote legislation and trends formalizing and securing customary and common rights to natural forests for local livelihoods, including ensuring equal access rights for women and men.

Sida may support traditional common property management systems, including the ability of the system to evolve and adjust to changing circumstances.

Sida may strive to ensure that consequences for vulnerable groups resulting from changes in forest tenure (e.g. formal titling and concessions) and/or conversion of forest land are taken into account in development plans.

Protected areas and wildlife

Wildlife, non-timber forest products, aquatic resources (e.g. fish) and grazing areas are often important and function as important safety nets for local livelihoods of marginal groups. These resources are (more or less by definition) often most abundant in biodiversity hotspots, and hence of high relevance for formal protection. However, when protected areas are established, benefits are more often captured largely by governments, private foundations or tourist companies while local communities may pay a high cost since they are often excluded from access and use.

Sida may promote protected areas as part of broader strategies and plans for rural development, land use planning and land allocation while fully ensuring that the issue of rights and access of local communities and indigenous peoples is addressed. This should, as a minimum, include ensuring that protected areas do not lead to further marginalisation of local communities and indigenous peoples.

In addition, Sida may ensure that wildlife resources, and/or conservation areas can be accessed and/or used by local communities for sustainable harvesting as well as non-consumptive use, and a basis for local businesses, including eco-tourism, hunting quotas, and other small-scale and local businesses.

Sida may also encourage collaborative and community-based management, and collective local user rights to wildlife resources and/or areas with high conservation value, provided these are managed sustainably.

Genetic resources

Genetic resources include both domesticated (crops and livestock) and wild diversity. Both are essential in ensuring food security and income. Today's diversity in crops and varieties, along with its associated traditional knowledge, is based on the collective work of farmers and local communities spanning thousands of years. A key aspect of this is the traditional right of farmers to save, reuse, exchange and sell seed from their own harvests.

Sida may support policy research and policy development related to access to and the fair and equitable sharing of benefits from genetic resources and related knowledge of biological diversity.

Efficient and improved use of genetic resources through, for example, plant and livestock breeding is a key factor in the development of natural resource-based production. Countries need good systems to assure clear rules for tenure of such resources. An analysis of the local situation is crucial to understand how a good balance may be struck among the different norms and interests.

In many countries, the public seed supply system has been weakened. This has underlined the importance of the traditional rights of farmers to save, re-use, exchange and sell seeds from their own harvests. The farmer's right to a choice among market-based and other alternatives should be reinforced based on the local situation. Public plant breeding schemes and public gene banks should be strengthened, and the on-going

effort to develop an international regime on access and benefit sharing is important.

Access to livestock genetic diversity on the part of small-scale farmers and pastoralists, as well as opportunities to develop their own breeds, calls for increased attention by governments and other development actors.

Bio-piracy is a major issue. It refers to the appropriation of the traditional knowledge and genetic resources (plants, animals) of local communities by individuals or institutions seeking exclusive control over these resources through intellectual property, without the agreement of local communities or without the consent of relevant government authorities.

Petroleum and minerals

These are high-value commodities characterised by political sensitivities and very large investments. In most countries, ownership of these resources is vested with the state. Resource development is usually undertaken by private operators – often foreign multinational companies – on the basis of agreements or licences with the state. In some cases, the state has ceded important power and economic rights to private operators, virtually creating a state within a state.

Extracting operations are often associated with social and environmental impacts, including taking over land and other resource rights. Appropriate arrangements that maximise the benefits and minimise the costs of these operations to local resource users need to be made.

Extracting operations often lack transparency in the flow of revenues. This can hide gross corruption, squander resources and contribute to political instability and violence. Initiatives such as the Kimberley Process, the aim of which was to prevent diamond resources from being used to fund conflict activities, is an example of a recent positive development. The Extractive Industries Transparency Initiative (EITI) is another good example.

6. Donor collaboration

The growing recognition of the role of resource tenure rights for rural development and poverty eradication by various multilateral and bilateral organizations provides strong grounds for Sida's enhanced engagement, as well as coordination of its activities with other donors. Resource tenure reform is, by definition such large scale and complex interventions that it is impossible to act as a single donor without very strong commitment from the government and other donors. There is therefore a need for sustained, coordinated land reform support programmes that involve governments and donors, as well as a need for carefully considered, appropriate mechanisms for the provision of necessary financial and technical assistance.

Sida may continue to work in international forums and may harmonise its support with donors, multilateral agencies and development banks working on natural resource tenure in order to avoid duplication of missions. It may work cooperatively to encourage governments with urgent resource tenure problems. This may include engagement with the European Union, the international financial institutions and the UN, and include multi-donor strategic initiatives such as the joint World Bank-funded Cities Alliance of UN-Habitat, the CGIAR and similar organizations.

Annex 1

MDG specific targets and indicators for natural resources

Millenium Development Goal 1. Eradicate extreme poverty and hunger

Target 2: Reduce by half the proportion of people who suffer from hunger

Indicator 5. Proportion of the population below minimum level of dietary energy consumption (FAO)

Millenium Development Goal 7. Ensure environmental sustainability

Target 9: Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources

Indicator 25. Forested land as percentage of land area (FAO)

Indicator 26. Ratio of area protected to maintain biological diversity to surface area (UNEP)

Target 10: Reduce by half the proportion of people without sustainable access to safe drinking water

Indicator 30. Proportion of the population with sustainable access to and improved water source (WHO/UNICEF)

Indicator 31. Proportion of the population with access to improved sanitation (WHO/UNICEF)

Target 11: Achieve significant improvement in lives of at least 100 million slum dwellers, by 2020

Indicator 32. Slum population as percentage of urban population (secure tenure index) (UN-Habitat)

Annex 2

Human rights in relation to natural resources

Article 1 of both the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the International Covenant on Civil and Political Rights (ICCPR), which enshrines people's right to self-determination to pursue their economic, social and cultural development as well as their right to be in no case deprived of their own means of subsistence.

Article 17 of the Universal Declaration of Human Rights (UDHR) which enshrines the right to property as the right of everyone to own property alone or in association with others, as well as the right to not be arbitrarily deprived of property. Different regional human rights treaties also safeguard the right to property.

Article 26 of ICCPR, non-discrimination as a central human right.

Article 27 of ICCPR, which protects the rights of minorities.

Article 11 of ICESCR recognizes the fundamental right to be free from hunger and the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions.

Article 14 of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) provides for the elimination of discrimination against women in rural areas in order to ensure, on a basis of equality of men and women that they participate in and benefit from rural development. In particular, women have the right to access agricultural credit and loans, marketing facilities, appropriate technology and equal treatment in land and agrarian reform as well as in land resettlement schemes.

Articles 13–19 of the ILO Convention No. 169 concerning Indigenous and Tribal Peoples, safeguard in a comprehensive way the rights of indigenous peoples to their lands and territories.

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Glossary of organisations

CGIAR	Consultative Group on International Agricultural Research, www.cgiar.org
CIAT	International Centre for Tropical Agriculture / Centro Internacional de Agricultura Tropical, www.ciat.cgiar.org
CIDA	Canadian International Development Agency, www.acdi-cida.gc.ca
DFID	The UK Department For International Development, www.dfid.gov.uk/
EC	the European Commission, http://ec.europa.eu/index_en.htm
EITI	The Extractive Industries Transparency Initiative www.eitransparency.org/
ELDIS	(Eldis is one of a family of knowledge services from the Institute of Development Studies, Sussex), www.eldis.org
EU	European Union, www.ec.europa.eu/comm/development
FAO	Food and Agriculture Organisation of the United Nations, www.fao.org
FARA	Forum for Agricultural Research in Africa, www.fara-africa.org/
GDPRD	Global Donor Platform on Rural Development, www.donorplatform.org
GTZ	German Development Cooperation, www.gtz.de
IFAD	International Fund for Agricultural Development, www.ifad.org
IFPRI	International Food Policy Research Institute, www.ifpri.org
IIED	International Institute for Environment and Development, www.iied.org
ILC	International Land Coalition, www.ifad.org/partners/landcoalition.htm

IUCN	World Conservation Union, www.iucn.org
KIT	The Royal Tropical Institute / Koninklijk Instituut voor de Tropen (KIT) www.kit.nl
NARSIS	Natural Resources Information System, www.ids.ac.uk/narsis
NEPAD	New Partnership for Africa's Development, Market Access and Agriculture Priority, www.nepad.org
NRI	Natural Resources Institute, www.nri.org
ODI	Overseas Development Institute, www.odi.org.uk
OECD	Organisation for Economic Cooperation and Development, www.oecd.org
OECD DAC	The Development Assistance Committee of OECD, www.oecd.org/dac/
OECD DAC	Network on Conflict, Peace and Development Co-operation (CPDC) www.oecd.org/dac
OECD DAC	Poverty Network, www.oecd.org/dac
RRI	Rights and Resources Initiative, www.rightsandresources.org
RRI	Resource Renewal Institute, www.rri.org
SFLP	Sustainable Fisheries Livelihoods Program, www.sflp.org
SLU	Swedish University of Agricultural Sciences, www.slu.se
Sida	Swedish International Development Cooperation Agency, www.sida.se
Trade Africa.biz	The Africa Regional Commodity Link, www.tradeafrica.biz/
UNDP	United Nations Development Programme, www.undp.org
UNEP	United Nations Environment Program www.unep.org
UNESCO	United Nations Educational, Scientific and Cultural Organisation, www.unesco.org
UN-HABITAT,	United Nations Human Settlements Programme www.unchc.org
UNIFEM,	United Nations Development Fund www.unifem.org
UNPFII	The United Nations Permanent Forum on Indigenous Issues. www.un.org/esa/socdev/unpfii/
USAID	United States Agency for International Development www.usaid.gov
Wetlands International	www.wetlands.org
WB	World Bank, www.worldbank.org
WFP	United Nations World Food Programme, www.wfp.org
WIPO	United Nations World Intellectual Property Organisation, www.wipo.org
WTO	World Trade Organisation, www.wto.org
WWF	World Wide Fund For Nature (or just WWF, the global conservation organisation), www.wwf.org

Contributors to this document

This document is the result of a process that started in May 2006. A first document was prepared, consisting of an overview of resource tenure in the various parts of Sida's work, as well as the results of a series of interviews with people at Sida and with those connected to Sida's work.

A first workshop on 6 June 2006 was the basis for developing a discussion paper, which was discussed in a second workshop on 15 August 2006. This was a well-attended meeting, with many lively if not heated debates. Comments arising from this workshop, written comments provided after the meeting, as well as parts provided by various contributors, were incorporated in the discussion paper. This resulted in the present document, which has served as background document for the preparation of the Sida Position Paper on Natural Resource Tenure.

Recognizing the importance of Natural Resource Tenure issues in most Sida activities, the Department of Natural Resources and Environment initiated the process. A working group was formed to take this initiative forward. The group was composed of Erik Skoglund, Margareta Nilsson, Therese Sjömander-Magnusson from NATUR and Mikael Atterhög and Åsa Forsman from INEC. Annakarin Lindberg, also from INEC, and Sara Gustafsson from DESO joined the group at the beginning of 2007. Margareta Nilsson was the coordinator of the initiative. The principal editor, author and consultant for the work was Nighisty Ghezae.

During the preparation of the discussion paper and this background document, *Parts of the text were contributed by:*

Per Knutsson	University of Gothenburg (Wetlands/coastal zones)
Gloria Gallardo	University of Uppsala (Wetlands/coastal zone)
Maria Berlekom	SwedBio, Swedish University of Agriculture – SLU (Protected areas and Wildlife)
Karin Gerhardt	SwedBio, SLU (Rangelands)
Pernilla Malmer	SwedBio, SLU (Genetic Resources)
Susanne von Walter	SwedBio, SLU (Forests)
Eva Stephansson	Environmental helpdesk, SLU (Petroleum and Minerals)

Linda Engström	Environmental helpdesk, SLU (Petroleum and Minerals)
<i>Written comments were provided by:</i>	
Jan Erik Gustafsson	Royal Institute of Technology (KTH), Stockholm
Michael Atterhög	Sida INEC (Department for Infrastruc- ture and Economic Cooperation)
Christopher Tanner	
Daniel Asplund	Sida NATUR (Department for Natural Resources and the Environment)
Göran Tannerfeldt,	Independent consultant, Stockholm
Fernando de Medina-Rosales	Oslo Governance Centre, UNDP, Oslo
Lasse Krantz	Embassy of Sweden, Nicaragua
Margaretha Sundgren	Embassy of Sweden, Ethiopia
Elina Eskola	Sida INEC
Daniel Slunge	Environmental Economic Unit (EEU) University of Gothenburg
Martin Linde-Rahr	EEU, University of Gothenburg
Gunnar Köhlin	EEU, University of Gothenburg
Sara Gustafsson	Sida DESO (Department for Democracy and Social Development)
Göran Björkdal	Embassy of Sweden, Senegal
Reidar Persson	SPM, SLU
Owen Greene	CICS, Bradford University– Saferworld Help-Desk, Bradford University
Debi Duncan	CICS, Bradford University– Saferworld Help-Desk, Bradford University
Victoria Jennett	U4 Helpdesk, Transparency International
Helen Nyberg	Sida SAREC (Department for Research cooperation)
Åsa Forsman	Sida INEC
Therese Sjömander-Magnusson	Sida NATUR
Margareta Nilsson	Sida NATUR

The following persons were interviewed in the first phase of the preparation:

Per Sevastic	Sida DESO
Mette Sunnergren	Sida DESO
Lena Ekroth	Sida DESO
Eva Ohlsson	Sida SAREC
Per Ronnås	Sida POM (Department for Policy and Development)
Anne-Charlotte Malm	Sida INEC
Ola Möller	Sida NATUR
Inge Gerremo	Sida NATUR
Maria Berlekom	SwedBio, SLU
Karin Gerhardt	SwedBio, SLU
Pernilla Malmer	SwedBio, SLU
Susanne von Walter	SwedBio, SLU
Peter Herthelius	Sida NATUR
Mats Svensson	Sida AFRA
Ingvar Backeus	Uppsala University
Håkan Tropp	Stockholm International Water Institute, SIWI
Hans Mattson	KTH

Amanda Hammar	Nordiska Afrikainstitutet (NAI)
Kjell Havnevik	NAI
Magdalena Svensson	Sida INEC
Åsa Hejne	Sida INEC
Rolf Folkesson	Sida INEC
Thomas Melin	Sida INEC
Ingvar Andersson	Sida NATUR
Jan Grafström	Sida INEC
Henrik Riby	Sida INEC

Halving poverty by 2015 is one of the greatest challenges of our time, requiring cooperation and sustainability. The partner countries are responsible for their own development. Sida provides resources and develops knowledge and expertise, making the world a richer place.



Sida

SWEDISH INTERNATIONAL
DEVELOPMENT COOPERATION AGENCY

SE-105 25 Stockholm Sweden
Phone: +46 (0)8 698 50 00
Fax: +46 (0)8 20 88 64
sida@sida.se, www.sida.se