



WORKING PAPER 2000:2

# **Regional Public Goods and the Future of International Development Co-operation**

**A Review of the Literature  
on Regional Public Goods**

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## Table of contents

<b>1</b>	<b>Introduction</b> .....	5
<b>2</b>	<b>Decomposing the conceptual amalgam of regional public goods</b> .....	7
	2.1 Public Goods .....	7
	2.2 Defining public goods .....	8
	2.3 Demarcating the region.....	11
<b>3</b>	<b>Identifying regional public goods</b> .....	14
	3.1 Spatial range and type of public good.....	15
	3.2 Spatial range and aggregation technologies .....	16
	3.3 Contextually contingent considerations .....	18
<b>4</b>	<b>Managing Public Goods</b> .....	22
	4.1 How much regional public goods should be produced? .....	22
	4.2 How much regional public goods will be produced? .....	25
	4.3 What is the role of private and public actors in providing regional public goods? .....	28
	4.4 At what institutional level should international public goods be produced?.....	30
<b>5</b>	<b>Regional public goods and the role of present nation states and regional institutions</b> .....	32
<b>6</b>	<b>Regional public goods and democratic participation</b> .....	34
<b>7</b>	<b>Public goods and material inequality</b> .....	36
<b>8</b>	<b>Regional public goods as a venue for economic development</b> .....	37
<b>9</b>	<b>Regional public goods and security provision</b> .....	39
	<b>Bibliography</b> .....	42

# 1 Introduction

To attack poverty, the World Bank Report of 2000/2001 asserts that “many of the challenges facing poor countries have solutions that involve the production of international public goods.” (World Bank 2000:181). Similarly, the authors of the recent and already influential book *Global Public Goods: International Cooperation in the 21<sup>st</sup> Century* (Kaul et al 1999a) disclose their expectations of the public goods approach. Reminding us of recent civil strifes, conflicts, genocides, environmental and medical challenges, they suggest that “today’s turmoil reveals a serious underprovision of global public goods” (p. xxi). The call for public goods is a call for e.g. widespread security initiatives, transboundary environmental laws, financial stability, and universal usage of cures for contagious diseases.

As many international public goods affect developed and developing countries alike, pointing to this global interdependence is thought to provide a new rationale for international development cooperation breaking with the prevalent donor fatigue.

The call for international development cooperation to provide public goods is also a call for the provision of regional public goods. In contrast to conventional foreign aid that has a global approach or focuses on individual countries, issue-oriented transboundary networks on a regional scale are widely conceived as an emerging answer to the quest for transnational forms of governance.

In accordance with the Terms of Reference set forth by EGDI, this report reviews the current discussion on regional public goods with a particular focus on the following issues:

- *The conceptual history of regional public goods.*

The research on regional public goods is in its infancy. However, this is not the case with the components of this conceptual amalgam: the research on regionalism and on public goods respectively. Consequently, the research on regionalism and the research on public goods is reviewed with the aim to inform the discussion on regional public goods. Moreover, the literature recognizes that an overtly generous application of this conceptual apparatus might divert attention from other, well established and understood areas of international development cooperation and provide for a mismatch of policy initiatives. The report accordingly reviews existing schemes to identify and classify regional public goods. Furthermore, acknowledging that the proper identification of a regional public goods is contingent on the available legal and technical conditions, the review develops guidelines to identify regional public goods within a particular empirical setting (chapters 2 and 3).

- *A functionalistic approach to regional public goods and the effect on prevalent institutions.*

A functionally driven and geographically demarcated definition of a “region” underlies much of the literature on regional public goods. This functional, issue-oriented approach to regional public goods suggests a political rationale linking authority to specific sectors and competencies. In this context, the characteristics of the public good and the range of externalities will define the geographical demarcation of a region. Linking authority to sector specific competence implies primacy for the regional agencies most able to manage regional public goods. The most able agents, from a functional perspective, will not necessarily coincide with the established political and economic regional organizations. The relation between

existing political institutions and institutions suggested by the regional public goods approach is analyzed in this review (Section 2.3 and Chapter 5).

- *The effective management of regional public goods in a comparative perspective.*

A long-standing tradition has paid attention to the distinguishing features of public goods, their influence on incentives, and suitable venues for their effective management. The review draws on this literature to compare policies appropriate for regional public goods and policy approaches for global and national public goods. It furthermore outlines the discussion of the division of labor between private and public agents in relation to regional public goods provision (Chapter 4).

- *Regional public goods and contemporary development studies.*

This review situates the nascent interest in regional public goods in the intellectual context of contemporary development studies. Viewing regional public goods from the perspective of development studies, four areas stand out: the contribution of regional public goods to the quest for democracy (chapter 6); regional public goods as a means to address material inequalities (chapter 7); regional public goods as a venue for economic development (Chapter 8); and regional public goods in relation to security provision (Chapter 9).

## 2 Decomposing the conceptual amalgam of regional public goods

In this section, the conceptual amalgam of regional public goods will be decomposed to give an overview of the conceptual history and meaning of its components. In relation to the analysis of the concepts of “public goods” and “region”, Chapter 3 outlines the literature focusing on aspects relevant for the proper identification of public goods suitable for international development cooperation on a regional level.

### 2.1 Public Goods

The concept of public goods is not new in the discussion on international development cooperation. Nevertheless, acknowledging that transboundary forces increasingly shape people’s lives, the concept of public goods has recently gained furthermore attention as a motive for the future of international cooperation and an inspiration for the design of international institutions. The concept of public goods has identified areas in need of collective action on global, regional and national levels.

The gravitation towards a public goods terminology within the discussion on development holds great potential. As will become clear from the review below, the generic nature of the concept of public goods has facilitated a common framing of various challenges to cooperation previously thought to be separate. Problem areas are becoming linked and joint efforts are being made to seek common solutions. Furthermore, looking at the world through the conceptual lens of public goods may increase the awareness of interdependence between developed and underdeveloped areas. Calling on solidarity, as well as the self-interest of the ones better off, this interdependence supports the appeal to reach out and support regional and global initiatives to produce public goods (Russet and Sullivan 1971:850ff). In addition to that, the concept of public goods benefits from a long standing academic tradition concerned with ways to design the institutional setting to overcome generic problems of public goods provision.

Notwithstanding the advantages with an increased interest in international public goods, the gravitation towards this approach is also a cause for concern. The most urgent concern is that interest in this conceptual amalgam may divert attention from pressing international cooperation within already established analytical frameworks. The advantages gained by the analytical framework offered by public goods may be outweighed by the distraction of attention from currently acknowledged, well understood, and dire problems in the international community (Ferroni 1999; Kanbur et al. 1999). Furthermore, the concept of public goods was originally developed within the academic tradition of economics where it holds a very precise and technical definition distinguishing it from other neighboring concepts (Samuelson 1954; Sandler 1998). Consequently, a policy oriented adoption of this conceptual apparatus stands the risk of pouring a lot more wines in this wineskin than it can hold. Obviously such usage of the conceptual apparatus works against the ambition to facilitate communication between the academic and policy communities. Furthermore, and even more disturbing, this conceptual generosity may hamper and mislead the discussion within the international community set out to work for increased cooperation. Calling different phenomenon by the same name may lead to an inaccurate analysis of the situation. As the theoretical discussion of public goods is associated with a specific set of

recommendations for action, the misuse of the concept may lead to a mismatch of solutions to problems. Kanbur, Sandler, and Morrison (1999) take this argument further. They differentiate not only between public and other goods but also between *different kinds of public goods*. This is done in an attempt to “resist the temptation to lump these goods into a single class that abides by one set of policy recommendations.” (p. 58). Following Kanbur et al. (1999), two distinctions have to be made before assigning a policy recommendation drawing on research on public goods: (1) a distinction between public goods and other types of goods, and (2) a distinction between different kinds of public goods. Depending on these distinctions, different policy recommendations will apply.

## 2.2 Defining public goods

The unique characteristic of a public good is that, once it has been produced, each and everyone can enjoy it without limiting the possibility for anyone else to do the same. Once security has been obtained within a region, all its inhabitants can freely enjoy this public good. Likewise, a lighthouse in a narrow waterway can be enjoyed by sailors without limitation (save a reservation for a crowding out effect). The same is often said about ideas or ideologies. Once an idea has been thought through or an ideology has gained common acceptance, everyone can enjoy them without diminishing the possibilities for anyone else to also enjoy them.

Paul Samuelson’s 1954 article, “The Pure Theory of Public Expenditure”, is frequently referred to in the literature as one of the most important stepping stones in a systematic discussion of public goods. In his quite technical article, Samuelson identifies two defining characteristics of a public good:

- (i) *Non-excludability*, i.e. once the good has been produced, its benefits or malice accrues to all. Put differently, individuals not contributing to the payment of the good cannot be excluded from consumption.
- (ii) *Non-rivalry*, i.e. consumption by one actor does not reduce the supply available to another. It does not cost anything when, in addition, other persons consume the good (Samuelson 1954).

‘Externalities’ and ‘marginal costs’ are two concepts very closely related to these defining criteria. Moreover, ‘free riding’ is a closely related strategy for action in a public goods situation. The criteria of non-excludability thrive on the concept of externalities. Externalities arise when the effects of an action are not born by the actors directly involved but by someone else. Consequently, externalities are sometimes called third party effects. They can be both positive and negative. If the production of a private good causes a firm to release pollution into the nearby river this producer is causing a negative externality. A positive externality is produced if the water is purified, as everybody downstream can then enjoy this benefit. If the cost associated with a negative externality is effectively attributed to the agent behind the externality, the externality has been ‘internalized’. Positive externalities can be internalized when the values added by an actor's initiatives are confined under the control of that same actor (Coase 1937).

Using a rather precise conceptual apparatus, economists frequently talk about the marginal cost of consumption. The marginal cost of consumption is the extra cost when one extra unit of a good is consumed. With this terminology, the criteria of non-rivalry is met when the marginal cost of

additional consumption is zero (MC=0). Clearly, everyone can consume a public good without limits as the marginal cost of additional consumption is zero. Yet, this is not the case with private goods which always have a marginal cost above zero.

Free riding occurs if a person takes part in the benefits of a good without giving an equal contribution to its production. Free riding is quite a general social phenomenon. Yet, it is typically harder to avoid when dealing with public goods than with private goods. (The literature on regional public goods includes a discussion of the spread of free riding when international development cooperation is inspired by the approach of regional public goods. This discussion is revisited in Chapter 4 of this review.)

The two variables from which Samuelson builds his criterias can be presented in a two-by-two table. (Table 1.) This table delineates the conceptual boundaries of public goods and can be used to break down guidelines for the identification of public goods in empirical contexts.

**Table 1. Conceptual boundaries of public goods**

	<b>Rivalry consumption</b>	<b>Non-rivalry consumption</b>
<b>Excludable</b>	<b>Private good</b>	<b>Club good</b>
<b>Non-excludable</b>	<b>Common pool resource</b>	<b>Pure public good</b>

Adjusted from Kaul et al. 1999b:5.

Although current policy literature analyzes many areas utilizing the framework of public goods, Samuelson’s criteria calls for prudence in the identification of empirical examples of public goods (see chapter 3). To justify a wide use of the concept, the distinction is often made between ‘pure’ and ‘impure’ public goods. “Goods that only partly meet either or both of the defining criteria are called impure public goods”(Kaul et al. 1999b:4, Kanbur et al. 1999:61). The empirical examples of pure public goods are quite few which implies narrow boundaries for the discussion on international public goods. Thus scholars have proposed that the meaning of the concept ‘public goods’ should be expanded to indicate pure, as well as impure, public goods. This expanded conception of ‘public goods’ is widely accepted in the literature, and will henceforth be used in this review.

Because the term ‘public good’ is widened to incorporate what technically would be defined as ‘impure public good’, the discussion on regional public goods includes three important subclasses: club goods, common pool resources, and joint products.

### *Club goods*

A club good is a public good with non-rivalry consumption but for which, because of an institutional arrangement, consumption is restricted to members (see table 2). Members of a club may charge a toll or a user fee to exclude consumers not willing or able to pay. “A club represents a clever institutional arrangement for getting users to indicate how much value they place on the good and to be charged accordingly.” (Kanbur et al. 1999:62). A transnational road for which a toll is extracted is an example of a regional club good. The composition of a vaccine limited in use due to intellectual property rights is another example of a regional club good.

Since nonpaying consumers are excluded, club goods do not have to rely on public financing but can instead be financed by the actual consumers. As the collective of contributors to the good equates with the collective of consumers, club goods imply less free riding than other forms of public goods. Pointing to this advantage, Kanbur and his co-authors (1999) advocate club goods. Moreover, club goods are advantageous because there are lower transaction costs associated with their management. These authors, however, recognize the downside of club goods which is that they may cause unwarranted exclusion. From Table 2 we know that club goods, once produced, are characterized by non-rivalry consumption; i.e. the extra cost of consumption is zero. If a pure public good is turned into a club good, potential consumers with no means to pay the club fee may be excluded from this benefit which leads to collective inefficiency (Kanbur et al. 1999:82). (A furthermore review of the argument of unwarranted exclusion is in chapters four and five below).

### *Common pool resources*

Goods for which exclusion is difficult to uphold and consumption rivalry are called common pool resources, CPR. The classical reference here is Garret Hardin’s 1968 article in *Science*: “The Tragedy of the Commons”. Hardin describes a group of herdsmen who graze their cattle in a common pasture. The tragedy starts the moment any one of the herdsmen realizes that he can gain personal benefits by increasing the size of his herd on the pasture. Each extra animal grazing the commons leads to additional destruction of the common pool resource. However, the negative effects are not forced on any individual herdsman but distributed within the group of users. Given this distribution of costs and benefits it is quite sensible for each herdsman to add extra animals to the flock which ultimately leads to the destruction of the common pasture due to overgrazing.

The collective irrationality of Hardin’s herdsmen serves model for many situations where the external negative effects are not immediately attributed to the specific actors involved. Much of the literature on CPR management has been concerned with small scale, local projects from which a number of policy guidelines have been worked out (Ostrom 1990). The increased awareness of the volatility of external effects of what originally is national or sub-national activities has encouraged attention to regional CPR such as transboundary watersheds (Cook and Sachs 1999). Attempts to extrapolate insights from the traditionally local, small scale oriented CPR research to an international level, are presented in Robert Keohane and Elinor Ostrom’s co-edited book “*Local Commons and Global Interdependence: Heterogeneity in Two Domains*” (1995).

### *Joint products*

Unlike club goods and CPR, joint products are not easily characterized using Samuelson’s two variables. Consequently, joint products are not found in Table 2. A public good is a joint product when one specific activity yields two or more outputs; i.e. the provision of a specific good has external effects in the form of indirect outputs. The difference between what should be labeled a

'joint product' of an activity, and what should be referred to as the 'external effect' of that activity is not clear in the literature. Nonetheless, the outputs labeled as a joint product are more distant from the initial good than are direct external effects from the initial good. Kanbur et al. (1999) make the distinction between joint products that are "ally-wide" and those that are "ally-specific". A regional security alliance will give security to its members which Kanbur et al. (1999) call an alliance-wide effect. If an enemy is kept from attacking, all members of the alliance stand to gain from the deterrence caused of the alliance. The alliance's military equipment and manpower can also be used to meet other goals such as coastal protection and disaster relief for one specific ally. Consequently, ally-specific products are jointly derived from the security alliance (p. 63f).

As will be outlined in some detail below, the rationale of joint products may provide a strong argument for increased international development cooperation. In return for assisting in the provision of a specific aid project, the donor community may be the beneficiary of the secondary effects which are jointly produced. Kanbur et al. (1999) use aid-assisted family planning as a case in point. Family planning may give the recipient country benefits in terms of enhanced quality of life for women as well as increased national economic growth as women gain access to educational opportunities when childbearing is postponed. At the same time, limited population size decreases energy demands which implies a slower increase in greenhouse gas emissions and global warming, which benefits the donor community. In a similar vein, Kanbur et al. (1999) suggest that the "substantial efforts by Scandinavian countries and their aid-giving institutions may be partly motivated by the *status* provided by these relatively large development assistance efforts" (p 64f, emphasis added).

### 2.3 Demarcating the region

"In contrast to conventional foreign aid that focuses on individual countries, transnational problems demand a multi-country, problem-oriented approach to development cooperation." This is the essence of the argument for *regional* public goods in Catherine Gwin's "Viewpoint" published by ODC (1999). In reference to this statement, Marco Ferroni elaborates the argument in his 1999 article "Reforming Foreign Aid: The Role of International Public Goods". He states: "Issue-oriented transboundary networks on a range of ventures are an emerging answer to the quest for transnational forms of governance, since the theoretical alternative of a world government is clearly neither feasible nor desirable" (Ferroni 1999:9). The approach advocated by Gwin, Ferroni and others suggest a dynamic interaction between the national, regional, and global level, where networks of different actors develop a web of issue-oriented and problem solving relationships.

Moreover, scholars writing on regional public goods advocate that this network is weaved in accordance with the principle of subsidiarity. The goal is to obtain functionally motivated institutional arrangements rather than overarching political organizations and general treaties. Kanbur et al. (1999) states that "subsidiarity dictates regional and sectoral decentralization." (p. 86). The weaving of the network of regional cooperation is most effective when it is developed in an incremental mode, beginning in sectors where the concerned actors readily can achieve mutual interests. The strategy of a sector-by-sector cooperation is based on the idea that actors should start to achieve mutual interests through cooperation in some sectors. The actors should do this despite large differences in the levels of development and obstacles that prevent cooperation in other sectors which will be ripe for cooperation in the future.

This approach to regional public goods reflects the theoretical foundations developed in the school of functional theory of regional cooperation and integration. One of the leading advocates of functional theory, David Mitrany (1966) argued in opposition to the federalists who strived for an overall international institutionalized system. He claimed that *concrete areas* should be identified in which states would see an immediate benefit of cooperation. In line with current research, Mitrany (1966) suggests that international organizations should be established to promote cooperation and transnational activities around basic functional needs such as transportation, trade, production, and welfare (cf. Hettne et al. 1999).

In line with a functionally and sector specific perspective on regional cooperation, the definition of 'region' in the regional public goods literature suggests a geographic demarcation of neighboring countries. As Ferroni (1999) notes, the geographical confinements of a region can be as large as a hemisphere and as small as a few neighboring countries (p. 5). Nevertheless, 'region' denotes a geographically demarcated area.

For most public goods a geographically oriented demarcation of a region is in line with the implications from the theoretical discussion on public goods. Theoretical discussions on public goods illustrate that the proper-sized region should include all those, but only those, actors being influenced by the externalities of a specific public good. (This assessment is furthermore discussed below). Consequently, an attempt to deal with a polluted river flowing through five countries would have to engage state and non-state actors in all five countries.

Nonetheless, not all public goods have such clearly geographically bound externalities. The shifting nature of public goods may imply that those affected by the externalities are found in loosely defined communities without geographical contact. Consider the public bad of HIV/AIDS. Even though as much as twenty percent of the inhabitants of a certain geographical region may be HIV positive, this disease is of course not caused by geographic determinants. International development cooperation set to address this or similar diseases may consequently find their proper region defined in non-geographical terms, e.g. cohorts of individuals with 'risk behavior'. Similarly, a security regime set to protect international human rights will have as its proper sphere of activity an esoteric, value based region without geographic demarcations. This calls for more plasticity in the definition of a region than provided for by the geographical approach. Illustrating how acknowledging this insight effects the demarcation of a region, Schultz, Söderbaum and Öjendal (2000) argue that there "are no 'natural regions, but these are constructed, deconstructed and reconstructed – intentionally or non-intentionally – in the process of global transformation, by collective human action and identity formation." (p??; cf. Deutsch 1957).

### 3 Identifying regional public goods

The call for international development cooperation derived from the discourse on international public goods is compelling. The 2000/2001 World Bank Development Report, *Attacking Poverty*, asserts that increased production of international public goods is key to many of the challenges facing poor countries (p. 181). A first step towards realizing these potentials is to distinguish between public and other goods. A number of goods (e.g. information, groundwater purification, defense) are commonly accepted as public goods. But the ambition of the discussion on international public goods is quite comprehensive and the conceptual tools associated with public goods are currently commonplace in literature on international development cooperation. As noted in Section 2.1 above, a generous use of this conceptual apparatus implies the risk of including too much in the concept. On this note Kanbur, Sandler and Morrison (1999) take precaution and they argue for a careful distinction between different kinds of public goods. Careful distinctions between different public goods are particularly important since different policy recommendations follow different kinds of public goods. Therefore we need to address the question of how to identify regional public goods suitable for international cooperation.

Moreover, as Kanbur et al. (1999) find ways to properly identify international public goods, they recognize that these goods differ in “terms of the reach of their benefits, the characteristics of these benefits, and how the overall level of the good depends on individual contributions”. Consequently, they suggest two ways to identify international public goods and to separate regional public goods from global and national public goods. The first approach centers on the spatial range of benefits. The second approach addresses how individual contributions to the public good determine the total quantity of the good available for consumption. Kanbur et al. (1999) call this “aggregation technologies”. Below, attention is sequentially turned to each of these approaches. These two different approaches are not mainly used to change the actual classification of a particular public good in terms of it being a regional public good or not. However, each approach proposes different rationales for *why* a particular good should be considered a regional public good; the different approaches allow for a more nuanced and critical classification of goods. This step is necessary for a proper match between goods and policy initiatives. Moreover, neither of the proposed classification schemes provide clear-cut arguments for why public goods should be assigned a particular classification. This review acknowledges that the proper identification of regional public goods is contingent of the available legal and technical conditions determining how externalities can be internalized, consumption can be excluded and rivalry avoided. Section 3.3 provides a set of guidelines to determine the proper classification of a particular good in an empirical context.

#### 3.1 Spatial range and type of public good

Using the spatial range of spillovers and “type” of public good as the key to categorize international public goods, Kanbur et al. (1999) work out the first classification scheme with these two questions:

- (i) What is the spillover range of the externalities?

- (ii) How does the particular good relate to the different types of public goods: pure, impure, club and joint products?

Kanbur et al. (1999) make the following suggestion on how to classify goods using these two questions:

**Table 2. Public goods classified by type**

Spillover Range	Pure Public	Impure Public	Club	Joint Products
National	<ul style="list-style-type: none"> <li>• groundwater purification</li> <li>• defense</li> </ul>	<ul style="list-style-type: none"> <li>• waterways</li> <li>• transportation grids</li> </ul>	<ul style="list-style-type: none"> <li>• communication networks</li> <li>• irrigation systems</li> </ul>	<ul style="list-style-type: none"> <li>• civil services</li> <li>• education</li> </ul>
<b>Regional</b>	<ul style="list-style-type: none"> <li>• <b>malaria cure</b></li> <li>• <b>pest eradication</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>immunization programs</b></li> <li>• <b>acid rain reduction</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>common markets</b></li> <li>• <b>extension services</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>peacekeeping</b></li> <li>• <b>cleansing a lake</b></li> </ul>
Global	<ul style="list-style-type: none"> <li>• global warming</li> <li>• financial practices</li> </ul>	<ul style="list-style-type: none"> <li>• curbing organized crime</li> <li>• controlling disease</li> </ul>	<ul style="list-style-type: none"> <li>• ecotourist sites</li> <li>• INTELSAT</li> </ul>	<ul style="list-style-type: none"> <li>• labor standards</li> <li>• Forest protection</li> </ul>

Adopted from Kanbur et al. 1999:69.

The classification by Kaul et al. (1999) is not the only one found in the literature. However, it corresponds with the classifications made by other researchers. Ferroni (1999), for example, warns against goal oriented definitions (e.g. peace, prosperity) for international public goods. He thinks that such definitions are overly general and therefore not useful. Instead of goal oriented definitions, Ferroni suggests “means definitions”. Table 2 is in accordance with the suggestion of means definitions as such definitions focus on public goods as “resources, processes, policies and institutions for achieving specified goals” (p. 5). Moreover, although “Regional Public Goods in International Assistance” by Cook and Sachs (1999) does not use such a fine grid, as Kanbur et al. (1999), their classification of public goods generally concurs with the list of Kanbur et al. (1999).

Nevertheless, some differences occur between this and other classifications. For example, defense is commonly stressed as an important regional public good elsewhere in the literature while Table 2 emphasizes peacekeeping as a regional concern and defense as a national issue. Financial stability is also frequently used as a key regional public good but not explicitly listed in table 2. Moreover, Kanbur et al. (1999), as opposed to Cook and Sachs (1999), take a regional perspective on cross-border transportation networks. Kaul et al. (1999) motivates their classification by emphasizing that transportation networks are crucial to economic development for the region as a whole and for inland countries in particular.

Despite the differences with other researchers, Table 2 captures a widely accepted classification of public goods. The categories used in Table 2 do not require detailed comments with the exception of the last column, joint products. To illustrate what a joint product is, Cook and Sachs (1999) use the example of how a disease may generate negative joint products. More specifically, Cook and

Sachs (1999) use the example of a regional public bad in the form of HIV/AIDS. The proportion of individuals with HIV/AIDS is generally higher among migrant workers, meaning that non-nationals overwhelm the national health system of the host country. The absence of cross-country financial or administrative arrangements to reimburse the host country easily strains interregional relations. In the same vein, financial instability in one part of a region often spreads instantly to neighboring countries, as was the case with the ‘tequila crisis’ following Mexico’s 1994 devaluation. Poor public management on a national level can hence lead to regional public bads. An elaborated and frequently cited narration of an international public bad due to financial incoherence and lack of prudence is provided in C. P. Kindleberger’s “The World in Depression 1929-39” (1986). On the issue of regional financial bads, see also Botchwey (1999).

### 3.2 Spatial range and aggregation technologies

To classify international public goods, Kanbur et al. (1999), suggest a second approach. This approach builds on “the fact that the manner in which individual contributions to the public good determine the total quantity of the good available for consumption varies among different goods”(p. 69). This classification scheme is furthermore elaborated in Sandler's article “Global and Regional Public goods: A prognosis for collective action” (1998).

The focus of this approach is the relationship between individual contributions and the overall level of the public good. To show that the overall level of a public good adds up in different ways, these authors say that public goods have different “aggregation technologies”. Four different aggregation technologies are important to the discussion on international development cooperation: summation, best-shot, weakest link, and weighted sum.<sup>1</sup> In Table 3, the four aggregation technologies are cross-tabulated with three spatial ranges of spillover. Each aggregation technology is explained below.

**Table 3. Public goods classified by the aggregation technology**

Spillover Range	Summation	Best Shot	Weakest Link	Weighted Sum
National	<ul style="list-style-type: none"> <li>• curbing urban air pollution</li> </ul>	<ul style="list-style-type: none"> <li>• neutralizing terrorists</li> </ul>	<ul style="list-style-type: none"> <li>• protecting against insurrections</li> </ul>	<ul style="list-style-type: none"> <li>• limiting run-off pollution</li> </ul>
<b>Regional</b>	<ul style="list-style-type: none"> <li>• <b>alleviating desertification</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>curbing malaria</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>toxic waste containment</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>acid rain reduction</b></li> </ul>
Global	<ul style="list-style-type: none"> <li>• global warming</li> </ul>	<ul style="list-style-type: none"> <li>• curing AIDS</li> </ul>	<ul style="list-style-type: none"> <li>• disease containment</li> </ul>	<ul style="list-style-type: none"> <li>• nuclear accident fallout</li> </ul>

Adopted from Kanbur et al. 1999:71.

A *summation technology* is the most common type of technology of public goods. It refers to goods where each unit contributed by an actor adds equally to the overall level available for consumption. Consequently, the contribution of each actor serves as a perfect substitute for that of another. If five nations each emits 1000 metric tons of toxic gas into the atmosphere, the impact on

<sup>1</sup> Besides these four kinds of aggregation technologies outlined by Sandler together with Kanbur and Morrison (1999), Sandler’s 1998 article mentions “threshold aggregation technologies”. The 1997 forest fires in South-East Asia and Australia are used as examples since no result could be obtained until a threshold level of fire-fighting was aggregated. In the 1999 ODC report with Kanbur and Morrison, the four other aggregation technologies are recognized as “the most relevant ones for the international public goods associated with development”(Kanbur et al. 1999:73).

the global level will be 5000 metric tons. Similarly, the regional level of success to alleviate desertification is equally dependent on the land-use practices in the neighboring nations. As will be shown in Section 4.2 below, the summation technology implies a pessimistic prognosis for collective action in the absence of an enforcing power, such as a government or a regional treaty with sanctioning rights.

For a *best-shot technology*, the overall level of the public good is determined by the contribution made by the actor leaving the largest contribution. Research efforts to find a cure for malaria is an exemplar as “whoever is first over the line wins for everyone”(Sandler 1998). In contrast to summation technologies, the contribution of each actor *does not* serve as a perfect substitute for that of another. On the contrary, the contribution of an actor who is not the best-shooter will have no effect on the aggregated level of the particular public good, even though these efforts may lead to other, unexpected findings and benefits. The actor who has the best chance of providing a particular public good should do so. Since the chances of success typically are positively correlated with the resources available, the best shooter is often one of the rich nations. With this aggregation technology, it is therefore counterproductive to transfer resources to less developed nations. Instead the solution should be sought in the richer countries the good should then be disseminated to poorer countries.

*Weakest link* aggregation technologies are characterized by the fact that the smallest contribution made by an actor sets the effective level available for the entire group, whether the group is a nation, a region, or the globe. Contagious diseases are a popular example since the effectiveness in containing the plague is determined by the nation making the least contribution. Environmental degradation caused by toxic wastes abides by the same rationale since the regional public good of clean air and water will only be achieved up to the level of the contribution by the nation making the least cutbacks.

The *weighted sum* is the fourth and final way of classifying public goods by means of their aggregation technology. Weighted sum technologies resemble summation technologies except that in the former, weights are applied to the individual contributions before summing them. (In summation technologies, each individual’s one-unit contribution of the public good counts equally towards the aggregate). The weighted sum approach to classifying public goods is more flexible as it considers how different factors, such as distance, time, and general wind directions, affect the interdependence created by international public goods. Kanbur et al. (1999) state that “the deposition on country  $i$  is the weighted sum of the emission of the other countries, where these weights are the share of other countries’ emissions deposited on country  $i$ .” (p. 72f). The weight attached to a country’s external effect on another country reflects the country’s relative position. For example, the radioactive fall-out following the accident in Chernobyl affected countries nearby and in the direction of the wind.

### 3.3 Contextually contingent considerations

Tables 3 and 4 illustrate a clear and comprehensive suggestion on how to identify goods in categories using different criteria. However, as is clear from the discussion on these classification schemes, the proper matching of any particular good to any particular category is contingent on contextual circumstances. For example, classifying agricultural research findings as a regional rather than a national public good, Kanbur et al. (1999) assert that such findings are not “specific to a country’s geoclimatic conditions.” Differences in a region’s geoclimatic conditions can

consequently change the classification and call for a national (or sub-national) rather than a regional development approach. Discussing regional club goods in the form of information, the same authors recognize that the presence of television or similar mediums may cause this good to better be regarded as a pure public good since the excludability of the service is effectively challenged by such mediums (Kanbur et al. 1999:67ff). Similarly, some goods that are classified as public goods presuppose the existence of other public goods. Cook and Sachs (1999) emphasize the need for contextual considerations for a proper classification of public goods. They state that new scientific and technological approaches, commonly regarded as public goods, “cannot simply be ‘borrowed’ or taken from advanced economies” and expected to be accessible to everyone in developing areas.

Although the contextual contingency of how to properly classify a good is an issue in the literature, there is not an explicit list of guidelines to apply to designate a public good suitable for measures on a regional level while considering contextual factors. Nevertheless, a closer examination of Samuelson’s defining criteria provides a point of departure from which such guidelines can be extrapolated. The literature can be sorted accordingly. This set of guidelines, or guiding principles, could be considered when identifying a public good.

The guidelines are worked out from a strict interpretation of Samuelson’s definition. Because we include both pure and impure public goods, and because Samuelson’s criteria are developed for a highly technical application, using the guidelines is not an easy matching exercise. Therefore it is in accordance with much of the literature to label a good as public even when the guidelines are not fully satisfied. Nevertheless, acknowledging that the proper identification of regional public goods is contingent on the available legal and technical conditions to determine how externalities are internalized, consumption is excluded and rivalry avoided, the guidelines can identify regional public goods within a particular empirical setting.

*(1) Non-excludability:*

The criteria of non-excludability states that once a public good has been produced its positive and negative externalities are not confined to the actors directly involved in its production. However, the extent to which externalities are internalized is not determined by the characteristics of the good. The proper identification of a public good can only be done in consideration of the prevalent context. The first guiding principle takes stock of this insight and identifies two ways to properly identify regional public goods while considering the context.

*(i) Possibilities of internalizing externalities:* Strictly speaking, for a good to be a pure public good, the externalities of the good must not be confined to the parties directly concerned. The key question to identify such a good is consequently: Are there any mechanisms by which the inhabitants in the area exposed to an externality can be excluded from its influence? The mechanisms by which externalities are internalized may be economic, political, judicial and/or cultural.

A word of clarification may help avoiding some misunderstandings regarding how to view this guideline. Analyzing a particular region, the conditions will probably not be either completely satisfied or completely ignored, i.e., the variables on which they build are not dichotomous where ‘present’ and ‘absent’ are the only two possible assessments. Mechanisms, like the ones described below, may exist and internalize part of the externalities. Below is a list of some of the possible types of internalizing mechanisms.

- a. Property rights to enforce payment from polluters by the ones exposed by the pollution. Regional bodies can apply the polluter pays principle beyond the nation state border.
- b. Environmental laws demanding purification of the production process. Such laws force the producer to internalize the negative externality in the cost of production. Regional bodies can support such laws as well as track down and punish violators beyond national borders.
- c. Regional treaties isolating or punishing actors jeopardizing the regional security. Such treaties may be implicit, ad-hoc, and even manifested in institutionalized regional security regimes.
- d. Channels to express strong public opinions that stigmatize producers of negative externalities such as polluting companies.
- e. Political institutions empowering those subjected to a negative externality to withdraw support. On a national arena, such institutions may come in the form of democratic elections. On a regional level, neighboring countries may act to discourage unsound behavior leading to negative regional externalities.

This list can be made longer, but the point remains: If such mechanisms exist, the externalities may be internalized and hence the cost or benefit will fall on the parties directly concerned, which is contrary to the idea of non-excludability. Thus, the existence of economic, political, judicial and cultural mechanisms to internalize externalities must be considered, when identifying a public good suitable for international cooperation in a particular context.

*(ii) Existence of proper prerequisites to make the goods widely accessible.* For a good to be a pure public good, or a CPR, it should be freely and unlimitedly accessible to everyone in the community. However the usage of a public good may demand access to certain techniques or a specific training without which the public good is no good at all. “Some public goods are a prerequisite before others can be beneficial”(Kanbur et al. 1999:77). A frequent example of this is the internet. Once an individual has access to a computer and an internet connection, the information flow on the web is virtually free and does not have restrictions. Obviously, access to the basic requirements is unrealistic for many people living in developing areas with little disposable income and high levels of illiteracy. Another example is information, disseminated via an education system. Information and education will be useless if the recipient does not have the proper training to understand it and make use of it. Isolated statements or theories without proper context are not beneficial (Callon 1994).

The need for prerequisites to benefit from regional public goods emphasizes the complementary nature of international development cooperation to provide regional public goods. Public goods on other institutional levels, as well as cooperation to provide private goods are vital for regional public goods to be beneficial. While proper clothing and food may not be public goods, without them, the poor cannot engage in regional development schemes for the provision of public goods. Similarly, national public goods may well have to be provided prior to a certain regional initiative, and demand for a global public good may not be satisfactorily met without regional initiatives. Consequently, promoting regional public goods at the expense of national public goods may prove inefficient. Thus, the regional public goods approach must be developed as a complement rather than a substitute to more traditional nation-state oriented development cooperation (Botchwey 1999:6; Ferroni 1999:17; Kanbur et al. 1999). As a corollary, the identification of regional public goods and their potential benefits must be made while considering national as well as global public goods.

## (2) Non-rivalry

The defining criteria of non-rivalry stipulates that the cost of increased consumption of the good is zero. Determining whether or not this criteria is satisfied, or nearly satisfied, is important. Without exhausting all possibilities, a list of contextually related considerations to determine the actual cost of additional consumption is presented below.

- (i) *Cost perspective:* The same good may simultaneously appear as a public good with no marginal cost to one part of a relationship and at the same time as a private good, or a public bad, to others. From the perspective of a citizen or member state of a regional security organization, increased military power and deterrence is clearly a public good. Once produced, the security regime may be enjoyed universally by all inhabitants. However, for the region's opponents, the same regional security regime and deterrence capacity will appear as a private bad, since it is developed at their expense (Mendez 1999; Russett and Sullivan 1971:848). Hence while the security provided by a regional security cooperation is characterized by non-rivalry to its members, it comes at a high price for non-members. (Note that this argument comes from the problem of defining the proper public).
- (ii) *Alternative costs:* The enjoyment of a public good in one part of a community may directly impede the enjoyment of another or even the same kind of public good in another part of that same community. An example can be found in the contemporary relationship between Southern Africa Development Community (SADC) and Zimbabwe. SADC has been criticized for its low key in response to the domestic turbulence in its member Zimbabwe. Critics argue that SADC's position should be understood as part of its overall strategy to facilitate security at a regional level (Olson 2000). This ambition requires careful political maneuvering in relation to its member states on whose support SADC and its mandate ultimately rests. SADC's goal is to provide security at the regional level in Southern Africa. If its recent critics are correct, SADC's silence in response to one of its member states is an impediment to the security of its citizens. Set in a political context, providing regional security implies decreased security for some of its members. The provision of a public good at one institutional level, or in one part of the community, may hamper public goods provision in another.
- (iii) *Inter- and intrageneration costs.* Activities by the present generation may well imply spillovers to future generations. Nuclear power production is an exemplar of this. Regarding this issue, the Brundtland Commission reports that development must meet the needs of the present without compromising the ability of future generations to meet their own needs. As yet, there is no way to determine future generation's evaluation of the spillovers from today's activities. This situation stifles the ability to extend the condition of non-rivalry to an inter-generational good (Sandler 1999).
- (iv) *Normative view.* To determine whether or not extra consumption of a good implies additional costs requires insights into what litigants regard as valuable. The externalities from the provision of one public good may be valued positively by some and negatively by others. Kanbur and his colleagues use the example of fluoridated water to elaborate this point. Some view fluoride water as harmful while others see it a positive health precaution. The individuals attaching negative values to fluoridated water must take costly measures to avoid drinking the treated water (Kanbur et al. 1999:61).

**Table 4. Contextually contingent guidelines for the identification of public goods**

Formal criteria	Contextually contingent guideline
(1) Non-excludability	(i) Possibilities of internalizing externalities
	(ii) Existence of proper prerequisites
(2) Non-rivalry	(i) Cost perspective
	(ii) Alternative costs
	(iii) Inter and intrageneration costs
	(iv) Normative view

## **4 Managing Public Goods**

The questions of how to manage regional public goods, how to co-ordinate action without an empowered authority, and how to make self-centered actors contribute to the common good, are all questions raised in the literature related to regional public goods. (A comprehensive overview is provided by Russett and Sullivan, 1971). Due to the limited scope of this review, attention will be paid to only a few of these issues.

In response to the unwarranted underproduction of regional public goods, Section 4.1 addresses the question of how much of a regional public good should be produced. To determine the optimal level of provision, the section identifies the trade-off between underproduction and free riding. It is assessed that the problem of determining the proper level of provision is more complex at the regional level than at the national, but less complex at the regional level than at the global level. The problem of finding the proper level of provision calls for deliberations amongst the parties involved on how to balance the trade-off between underproduction and free riding.

The discussion on international public goods is frequently motivated by hopes that this framing will cater for a profound basis for the future of international development cooperation. The public goods approach points to egoistic arguments for donors to provide foreign aid. Section 4.2 suggests that as donors and recipients typically are not part of the same region, the case for increased support for regional public goods is weaker than for global public goods.

Section 4.3 discusses the division of labor between the state and the market in response to regional public goods. Considering the varying nature of public goods as well as varying ideological standpoints, no single guideline for the role of the state and the market is provided by the literature.

Section 4.4 examines the principle that a public good should be managed by an agency whose geographic and sectoral mandates are closest to the spread of the externalities. This principle, if strictly applied, suggests that many agencies will transcend the present nation-states. Acknowledging the need to consider current political circumstances in the region as well as economics of scale and scope suggests an approach to the development of regional institutions guided by the principle of subsidiarity.

### **4.1 How much regional public goods should be produced?**

On the issue of underproduction, this section reviews the literature on how much of a regional public good should be produced. The section first outlines the general problem and subsequently applies it to the regional level.

Once a public good has been produced, it can not be divided into separate units to be consumed by separate consumers. We know from Samuelson's definition of a public good that, once produced, it is not discrete. However, the producer must determine how much, i.e. how many discrete units, should be produced. For example, once security has been produced it can be enjoyed equally by everybody. But this does not take care of the question of how much security should be produced (how many airplanes in the airforce, how many international treaties, how many courts etc.).

It has proven generically difficult to determine how much of a public good should be produced. As for private goods, there is a criteria for Pareto-optimal production of public goods which gives a theoretical account of the optimal production level. The supply of a public good is Pareto-optimal if the sum of the marginal utilities of the persons benefiting equals the marginal cost of supply. The complication arises when determining the marginal utility of the consumers of the public good. On a market with private goods, the consumer is forced to pay for the good at the counter and hence reveal his preferences, i.e. how much he is willing to pay for the good. But for public goods the situation is different because the consumer may enjoy the supply of social goods without having to pay up front for the good (non-excludability).

From the perspective of individual rationality, there is no reason why the consumer should reveal his willingness to pay for a public good since doing so would permit the public to make him pay that amount. Thus, the consumer's expressed willingness to pay cannot be used as an indicator of his preferences to determine the proper quantity to be produced. A simple example illustrates the problem. Suppose that four people, Adam, Bob, Carol and Dick are thinking about renting a videotape. If they decide to rent the video it will be a public good for them since the cost will be the same no matter how many of them eventually decide to watch ( $MC=0$ ). Suppose that everyone truly would evaluate the pleasure of watching the video to be \$2. If the rental cost is only \$3.50 everyone will have an incentive to understate the value that he/she places on watching the video hoping to get a free ride from someone else. Since everybody is likely to act in the same manner, they may well find themselves doing something else that night even though their collective willingness to pay would suffice to pay for the video. This situation illustrates how individuals trying to free ride turn individual rationality into collective irrationality and underproduction of public goods. On the generic problem of finding out the true value individuals put on a public good follows the problem of determining how much of a public good should be produced to meet the true public demand.

One way to find out the public's preferences is the use of a political voting system. Yet, complications arise since each voter knows that if he reveals his true preferences, the tax collector can use this information to extract payment. On the contrary, if the voter understates his preferences to avoid the risk of taxation, the voter can still freely enjoy the good. He can get a free ride. However, since all voters will deflate their true preferences, the production of the public good will be less than the true social desire. Thus, we find the commonly observed underproduction of public goods (Lipsey et al. 1990; Bannock et al., 1987; Encyclopaedia Britannica).

This individualistic logic, applied by separate individuals or nations, makes it irrational to reveal the true evaluation of a public good. This problem leads to difficulties in determining the optimal level of production of a regional public good. Because the confinements of the regional public good are hard to identify and because the concerned public is difficult to demarcate and address, determining the appropriate quantity at the regional level is much more difficult than it is on the national level. However, the problem of determining the appropriate quantity is even more distinct on a global level than on a regional level.

The situation leading to the free rider problem outlined above is one where the consumers stand a high risk of being a part of the collective of contributors. Free riding comes from each individual's attempt to take part in the collective of consumers but not the collective of contributors. The nature of public (collective) goods makes it possible to enjoy the good without contributing in parity with the true valuation of the good. In searching for the optimal quantity of regional public goods, the

situation is frequently somewhat different. This difference makes for another kind of free riding. In the context of international aid the collective of consumers (the recipients) typically differ from the collective of contributors (the donors). Consequently the incentive structure of the consumers to reveal their preferences has altered. Instead of deflating their reported preference to free ride, the free ride is now offered by *inflating* the preferences. This is the rational strategy because they will not be part of the collective of contributors. Hence an international donor agency is faced with an information problem where the recipients are trying to get a free ride at the expense of the donor (Kanbur et al. 1999:60). (The discussion on “free ride foreign aid” is further reviewed in Section 4.2).

Using democratic means to reveal the true value put on the good by the population of the recipient region can therefore lead to an exaggerated demand for the public good. This problem concerns the true preferences of the recipient community in terms of quantity as well as the type of public good.

In sum, allowing the recipient community to determine the agenda for public goods provision makes it rational for that community to free ride at the expense of the donor community. Accelerating donor fatigue is a likely consequence. Dealing with this problem by letting the donor community set the agenda for public goods provision would avoid some of the problems discussed above. Yet, this strategy would increase alienation and decrease ownership which contradicts most goals guiding international cooperation. As Ferroni (1999) emphasizes, this dilemma calls for a serious discussion on how to identify the proper quantity of public goods to be produced at the regional level. Such discussions must include as many of the litigants as possible, both within the donor and the recipient communities (Ferroni 1999:14). The prospects of such deliberations are weakened if the region from which the litigants are sought is loosely defined or spread over a vast area, as might be the case for regional public goods. Furthermore, the regional level may lack institutional mechanisms or channels to aggregate and deliberate the demands and values of its population.

## 4.2 How much regional public goods will be produced?

To set a prognosis for collective action for global and regional public goods, Todd Sandler (1999) goes beyond the analysis of collective action problems based on non-cooperative games such as the prisoner's dilemma.<sup>2</sup> In the standard prisoner's dilemma analysis, individual rationality moves towards collective irrationality (such as under production and unwarranted exclusion). Optimistically, Sandler stresses that the nature of interdependence created by different aggregation technologies of a public good implies a window of opportunity for international development cooperation.

As outlined above, Sandler recognizes that public goods have different aggregation technologies, i.e. the total quantity of public goods available for consumption is aggregated differently for different public goods. The way individual provision levels determine the total public good available for consumption has a profound impact on the possibility of international collective action (cf. Ferroni 1999).

Sandler's prognosis is positive, compared with the rationale of summation technologies on which much of the literature on public goods is built. Summation technologies typically ends up with the pessimistic, and non-cooperative, scenario of a prisoner's dilemma. In Sandler's best-shot scenario, the less good shooters free ride as they will benefit from the public good provided by the more advanced shooter. Sandler's argument is that "income inequality has a positive side-effect" for the poor as the availability of resources in richer countries increases the chances that a solution will be found to public bads inflicting the poor. If income distribution becomes more equal, the supply of best-shot public goods will be reduced (Sandler 1998:233).

Best-shot aggregation technologies provides a base for international development cooperation where the public good is produced by richer countries and later transferred to the poor. Writing in terms of 'free-ride foreign aid' Sandler states that "as the world confronts pending environmental, health and security exigencies for a best-shot ... the richest countries will provide the free ride for the world community." (Sandler 1998). The best-shot aggregation technology gives the rich countries little choice but to underwrite these free riders to ensure their own well-being and by doing so they provide international development cooperation.

With weakest link public goods the smallest level of the public good determines the level enjoyed by all countries. Consequently donors must bring up the level of the smallest contributor to what they consider a desired level. Such a situation presents a compelling incentive for international development cooperation. In this incentive, Sandler finds two strategies available for international development cooperation. First, aid can be directed explicitly to the production of the desired public good. Second, aid can aim to increase the income level in poor countries. The latter strategy rests on the assumption that the likelihood of a country contributing to the provision of a public good is related to the level of income in that country. (Writing with Kanbur and Morrison, this

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<sup>2</sup> The rationale of a prisoner's dilemma is this: When the benefits gained by an actor's efforts,  $b_i$ , are less than the cost of the effort,  $c_i$ , the actor will lose  $c_i - b_i$  for every unit contributed towards the public good. As the external effects of public goods spread the benefits from action to a wide area beyond the actor, this is often the case for public goods. Consequently, each actor's best strategy is not to contribute at all (Sandler 1998).

strategy is identified as less expensive than the second one, Kanbur et al. 1999:72). Sandler concludes that “If, for weakest-link, the income distribution among countries were to become more equal, then the smallest contribution level is anticipated to increase as the poorest country acquires more income...If, on the other hand, the income distribution among countries were to change so as to increase the income disparity between the poorest and the richest nations, then the contribution of the weakest-link nation, which is usually the poorest nation, is expected to fall relative to the desired contribution of the richest countries.” (Sandler 1998:233). Building on the weakest link argument, Sandler and others assert that as long as there are income disparities in the world, the wealthier will engage in international development cooperation as their own welfare is contingent on the level of public goods in poorer countries.

Even though the literature does not address the consequences of this aggregation technology from the perspective of the recipient, it is clear that the rationale of weakest link regional public goods provides an incentive for the recipient to provide nothing at all. If the donor considers the weakest link public good desirable, the recipient can be sure that the donor will offer a free ride in its attempt to reach the level considered adequate. Thus, in as much as this aggregation technology provides an argument for donors to do more, it also provides an argument for recipients to do less.

As just reviewed, the general implication of approaching international public goods from the perspective of their aggregation technology gives an optimistic prognosis for international collective action. However, commenting on the total quantity of international development cooperation, Sandler (1998) warns us that as awareness shifts to the beneficial effects awarded to poor countries from international public goods produced in the donor countries (best-shot), the support for more traditional forms of giving may decrease in the donor community. Recognizing that many of the public goods produced nationally by the donors also provide benefits for the poor, and consequently should count towards the donors overall supply of foreign aid, the donor community might see this as an excuse for furthermore, cuts in traditional forms of aid. Accordingly, Sandler (1998), writing in *Fiscal Studies*, discourages those hoping that awareness of increased interdependence will lead to increase international development cooperation. Yet, Sandler et al. (1999) indicate a slightly more optimistic conclusion in their ODC report *The Future of Development Assistance*. Stating that increased support to regional public goods will not eliminate the need for more traditional forms of international development cooperation, they express hopes that if “international public goods directly improve the well-being of the donors, then there may result an *increase* in development assistance.”(Kanbur et al. 1999:58, emphasis added, cf. 82f).

Even though Sandler (1998) takes a prudent position, the different aggregation technologies are generally thought to provide the donor with *egoistic* incentives to work with international development cooperation and consequently continue to supply foreign aid. However, differentiating between global and regional public goods, a more ambiguous picture appears. This is a differentiation which is not often made in the literature on international public goods. The case for the argument that egoistic incentives will augment the level of regional development cooperation is thus only lightly sketched in the literature. The underlying assumption behind this idea, that donors have egoistic incentives to support international development cooperation is that the donors are inflicted by the same public goods and bads as the recipient countries. However, as the recipient and donor often are members of different geographical regions, this may not be the case. Donors and recipients who are not part of the same geographical region will typically not be

inflicted by the same regional public goods. This has clear consequences for the motivation to provide international development co-operation.

Consider the weakest link argument. For global public goods, this clearly encourages the donor community to provide aid to increase the level of public goods in poorer countries as this level determines the donor communities' welfare. Here, we see the egoistic incentive. Concerning regional public goods, the donor and recipient are typically not members of the same region and consequently not subjected to the same public good (or bad). If this is the case, no egoistic incentive presents itself. As Ferroni (1999) laconically asserts, "unaffected countries are unlikely to be concerned"(p. 19).

The argument in the aggregation technology of best-shot is that better-off donors shall produce a public good later disseminated to the recipient. Curing malaria is used by Kanbur et al. (1999) as an example. As few donor communities are subjected to this disease, the egoistic incentive to undertake the costly endeavor of finding its cure is weak.

Considering the motives for actors *within* the same region, the case for cooperation is also bleaker than what first meets the eye. Both the weakest link and the best-shot argument is contingent on the existence of income differences which allows the poor to free ride and give cross-boundary cooperation a boost. As neighboring countries often find themselves in the same income cohort, the case for international development cooperation in the form of regional public goods, based on the rationale of weakest link or best-shot aggregation technologies is therefore weaker than it is for global public goods.

To conclude, the egoistic incentives advocated by Sandler and others assume that the donor and the recipient are subjected to the same public good (or bad) which is typically only the case with global, and not the case with regional public goods. On this note, Kanbur et al. (1999) state; "The presence of transnational spillovers from public goods ... means that developed countries have an interest to help provide these goods. The self-interest is strengthened when resulting spillovers possess some *donor-specific* benefits." (Kanbur et al. 1999:76, emphasis added; c.f. Ferroni 1999:1-2; Russett and Sullivan 1971:855). Consequently, the *egoistic* argument suggested in the literature should not be taken as an argument that lends support for the idea of increased regional development cooperation.

The literature provides ample arguments for the donor community in the West to support regional public goods with non-egoistic motives. Ferroni (1999), for example, specifies three non-egoistic motives for regional public goods provision. The first is concerned with *efficiency* since "you cannot hope to resolve a transnational problem with an uncoordinated set of national endeavors". The second is *prudential*. This motive states that regional public goods are a sine qua non for any effort to bring about improvements and growth in developing areas. Similarly, Ferroni recognizes that a systemic crisis (e.g. financial volatility) can quickly bring past donor investments in the region to nothing and spoil possibilities for effective international development cooperation. The third non-egoistic reason for regional public goods cited by Ferroni is *procedural*. This motive spotlights the potential for the regional public goods approach to circumvent well recognized agency problems between donors and recipients with different objectives and working under vastly different institutional preconditions. (This line of argument is revisited in Chapter 8).

### 4.3 What is the role of private and public actors in providing regional public goods?

The discussion of how to best manage public goods includes much more than suggestions on treatments of the pure technical particularities arising from the nature of a public good. This discussion is provided for in part by the ambiguity of what should in fact be considered a public good. As outlined above, identifying a public good is contingent on a number of contextual and normative considerations. Despite its somewhat technical appearance, the discussion of how to best manage public goods consequently has ideological and strategic undertones.

Proponents of market solutions illustrate how goods initially thought of as public goods can be transformed into private goods. When this occurs, the goods are salvaged from state interference and also benefit from the efficiency of private production. There are many ways to make this argument. (See Russett and Sullivan, 1971, for an elaborated review). The most common strategy is by way of defining private property rights. If private property rights are defined in relation to positive and negative externalities, the effects of the externalities can be internalized. A fascinating example of how private property rights can be used to internalize external effects is how lighthouses were financed in nineteenth-century England. Clearly, it can be very difficult to charge the users of the lighthouse for the service provided. Instead of trying to charge ship owners for their services, the English lighthouse owners sold their service to the owners and merchants in nearby ports. Port merchants who did not pay the lighthouse owners had trouble attracting ships to their port and hence lost many customers. This illustrates how the private property rights can be used to solve the problem of financing what seems to be a public good (Cowen 1993). Similar remedies have been developed in response to modern day environmental problems. Cleaning up a polluted lake typically involves a free-rider problem if there are no private property rights attached to the lake. Many people enjoy the benefits of a clean lake and no one can be charged for these benefits. Giving incentives to a private owner, by means of private property rights, means that polluters will be charged for their negative externalities and the lake will be clean.

Two problems are associated with the market oriented solution. The first concerns the basic institutional arrangements which the market needs to function. The second concerns the problem of inefficient exclusion. Concerning the first problem, Kaul and her colleagues (1999a) explain; “We know that the marketplace is the most efficient way of producing private goods. But the market relies on a set of goods that it cannot itself provide: property rights, predictability, safety, nomenclature and so on.” (p. x). Without public engagements, these goods are underproduced and the market malfunctions. Thus, the private market will not function unless public goods provision is undertaken by public agents. Consequently one of the most frequently used examples of regional public goods is an institutional arrangement supporting cross-boundary business institutions.

We turn now to the second problem that arises when the market is used to produce public goods. This is the problem of inefficient exclusion. This problem becomes relevant in relation to club goods. Regional club goods can be produced by firms, nations, or other institutions that uphold excluding institutional arrangements and extract payment by consumers of the good. The beneficial effects of club goods is that they can circumvent free riding. However, the negative effect of club goods is that actors lacking means to pay the toll or fee of the club will be excluded from consumption. In the absence of crowding, there is no basis for charging a toll or membership fee to adjust for the impact of additional consumption. Consequently, regional clubs causing unwarranted exclusion inefficiently use regional resources (Kanbur et al. 1999:82f). This concern is illustrated in the fight against the AIDS virus. Applying treatments developed by biotechnological firms has

lead to a decrease in death rates in the West, while figures are still alarmingly high and rising in many developing areas where the treatment is not affordable or available. To address this issue Kanbur et al. (1999) suggest that international development cooperation could be set to pay the 'club entrance fees' for developing countries (p. 82).

International development cooperation may support the supply of any particular public good. However, this decision does not have any obvious implication in terms of who should be commissioned to produce the good: public actors or private actors. Pure regional public goods must be financed by other means than direct extraction of payment by the consumer. In effect, a pure public good must be publicly financed since the non-excludability of the good hinders extraction of payment from the consumer. But from a theoretical point of view, the involvement of the public can stop here. Thus, a frequent misunderstanding concerning the proper producer of public goods can be evaded: public goods do not necessarily call on public provision. As Ferroni (1999) comments on the role of the state and the market, he emphasizes the need for the public to articulate goals and standards even in cases where the public uses the market to produce public goods. On a similar note, Kanbur and his co-authors (1999) are joined by Cook and Sachs (1999) in their argument that regional public goods such as the justice system, and military security should be publicly provided ( Kanbur 1999:76; Cook and Sachs 1999:436).

In sum, in choosing the producer of regional public goods, the literature does not provide a guideline determining who should produce what. The great variety of regional public goods implies that some regional public goods should be provided by the private market while others should be produced by the public. In fact, one public good can be provided by both private and public producers. Take the case of education. Many people agree that education has positive externalities leading to underproduction if left unattended by the public. Yet, this does not imply that there are no parts of the education system that are characterized by private goods properties. An example of this is found in specialized education designed for a specific production technique with clearly defined beneficiaries. International efforts to support the provision of education on a regional scale may be designed as a complement to a system with private payment for part of the good. Regional security is another example. Private agents may be called upon to support the protection of their property within the domains of their homes via insurance and alarms while the regional security regime supports the provision of security in the public space. However, as Cook and Sachs (1999) comments on joint endeavors where public and private agents work closely in the same area of public goods provision, the risk is that that private firms are edged out by financially stronger public actors with international backing (p. 442).

#### **4.4 At what institutional level should international public goods be produced?**

The generic problem of demarcating a region from the perspective of public goods comes from the shifting nature of public goods and the asymmetric impact of their externalities in geographic or other terms. Such problems have implications for how to find the proper institutional level for public goods provision. The positive externalities of a regional security regime call for very inclusive and accommodating agreements and institutions. On the contrary, the externalities related to a waterway may be confined to only a few members of the security regime. Two principle ways to organize collective action immediately stand out from this simple example. Either we conceive of an all-inclusive, macro region or, alternatively, we can consider many micro regional agreements each attending to the externalities of a particular public good. Besides the well-recognized collective action problems associated with each of these principle ways, the nature of

public goods calls for a particular trade-off. As mentioned above, the analysis of public goods implies that the proper-sized collective would include all, and only, those actors being influenced by the externalities of a specific public good. Kanbur et al. (1999) explain that “when the public good’s benefit range exceeds the geographical region of the provision-deciding collective, too little is produced because benefits conferred on non-member countries are not included in the collective’s provision decision. If, in contrast, the good’s benefit range is smaller than the collective’s combined area, too much of the good is then anticipated as /...payments/ are collected from those who do not benefit from the good.” (p. 60). Hence, when the collective of consumers of a public good is smaller than the collective of contributors to the provision of the good, the consuming community is given a free ride at the expense of the contributors.

The criteria of a perfect match between the community of contributors and the community of consumers implies that a separate institutional structure should be assigned to regulate and provide each regional public good separately. Such “perfect coincidence between spillover and decision-making domains is conducive to an efficient allocation of these transnational public goods since those people with the greatest stake in the decision can influence the provision level so that the associated benefits and costs are equated at the margin.” (Kanbur et al. 1999:84). This would lead to the existence of many institutions that will create substantial co-ordination problems and inefficient *economics of scale*, i.e. the provision cost per unit would be unwarrantedly high due to small production quantities. It would also lead to inefficiency in terms of *economics of scope*, i.e. costs could be cut by providing two or more international public goods jointly by the same institution instead of by separate institutions. Better economics of scope would be gained if existing infrastructure, competence, and capacity of a regional body would be used to provide more of regional public goods notwithstanding the mismatch between spillover and decision-making domain.

The trade-off between economics of scale, economics of scope and the aim to match the impact of externalities implies no real conclusion concerning which level to place institutions aimed at properly providing public goods. Moreover, the mandates of currently established political and economic regional organizations do not offer clear guidance as they typically have spurred from other objectives and historically specific events. (The discussion of the role of present regional organizations and nation-states is reviewed in Chapter 5).

Networks combining efforts at different institutional levels is one strategy much advocated in the literature. The design of such networks will most likely be a compromise between, on the one hand, the ideal of matching the impact of externalities, and, on the other hand, the political and economic constraints on international cooperation. Kanbur et al. (1999) suggest that the most appropriate principle to apply in the development of a regional network of public goods providing institutions is the *subsidiarity principle*. The subsidiarity principle suggests that “a cross-border spillover should be handled by the agency whose geographical and sectoral mandates are closest to that issue, subjected to the conditions that the agency possesses the capacity, or could be given the capacity to handle the issue, and the economies of scale and scope do not mandate a larger agency.” (p. 85).

## 5 Regional public goods and the role of present nation states and regional institutions

As a corollary of the externalities of public goods going beyond the traditionally dominant judicial sphere, i.e. the nation state, the future role of the state is inseparably related to the discussion on regional public goods. Analyzing contemporary changes in the rationale of international development cooperation, Catherine Gwin (1999) argues that in the “changing global context, developed countries seek ‘competent partners’ in the developing world, not ‘trusted allies,’ as under the Cold War.” (c.f. Botchwey 1999:6f). This functionally oriented approach to international development cooperation suggests a different political rational linking authority to a specific activity and competes and consequently breaks away from the traditional fixed link between authority and a definite territory or issue-area. Cross boundary externalities consequently implies cross boundary authorities which constitutes a challenge for nation-states and a call for initiatives on a regional level.

Nevertheless, the functionally driven orientation of the discussion on regional public goods also provides ground for a critical examination of present regional institutions. As in the case with the nation-states, regional institutions must be assessed from the perspective of their ability to provide viable solutions to specific cross boundary problems. Advocating the case for regional public goods, Cook and Sachs (1999) deplore the present “lack of the needed counterpart institutions” at the regional level and strongly emphasize the need for international development cooperation to provide support of capacity building initiatives at the regional level (p. 441).

Transcending the traditional nation-state orientation of international development cooperation, the literature on regional public goods strongly suggests a dynamic interaction between the national, regional, and global level. This network consist of a web of actors engaged in issue-oriented problem solving. (A review of this position is found in section 2.3). Kaul et al. (1999a) emphasizes the dynamics as they assert that “Without policy achievements by the national governments that ‘matter’ in particular issue areas, global goods – such as environmental sustainability, health or financial stability – are not likely to emerge. And that, in turn, jeopardizes national policy goals in many countries, creating a global public bad”(p. xxv). Rather than challenging existing nation-states, the regional initiative consequently provides an opportunity for nation-states to pool formal sovereignty to gain, or regain, real sovereignty by means of regional cooperation (Kanbur et al. 1999:83ff; Ferroni 1999:7, see also the discussion in Chapter 8 below).

Consequently, the call for regional solutions is not a call to abandon aid directed at the nation-state. The importance ascribed to the nation state is clearly articulated in the 1997 World Development Report arguing that just as “state-dominated development has failed”, so will stateless development: “Development without an effective state is impossible” (World Bank 1997). Thus, from the point of both theory and the donor community, the policy implication is clear: “strengthen the capacity of nation states to cope with global interdependence.” (Kaul et al. 1999a: xxvii). Nevertheless, as the case for regional initiatives is unfolded in the political logic of many developing areas, it may prove to be difficult to digest. Due to the infancy of the discussion on regional public goods and the emphatic lack of empirical studies, the literature only indirectly addresses the issue of how this change in international development cooperation will be

accommodated by leaders of present regional and national institutions. However, within the highly competitive nature of politics in many developing areas, even a moderate altering of the locus of power may be translated into a challenge for survival.

## 6 Regional public goods and democratic participation

A classical democratic virtue is to equip individuals with ways to influence processes which affect them. Hence a discussion of public goods holds great democratic potential. The best case scenario is that it will eventually facilitate people with powerful means to influence decisions concerning the management of public goods which already influence their lives, such as insecurity, lack of health and information.

Despite this, as Kaul, Grundberg, and Stern (1999a) argue when discussing participation and global public goods, 'participation' is not equated with democratic participation in terms of venues to exercise influence. These authors' focus on 'participation' views participation as a question of material equality; i.e. participation in the enjoyment of the material goods. Instead of attracting attention to questions of how to facilitate equal opportunities to influence priorities and decisions, Kaul et al. (1999a) are mostly concerned with questions of equal access to existing public goods and how to lubricate the production and spread of underproduced public goods. The only index entry in their agenda-setting book that contains 'democracy' refers to a discussion of democracy as a public good and not democratic influence over public goods.

The sparse attention to classical democratic ideals in the discussion on regional public goods should be understood as a consequence of the urgent issues this discussion centers on. Some of the public goods addressed in the discussion are in fact prerequisites for life. The discussion of regional public goods is focused on the need to come up with efficient and effective means to internalize negative externalities and forego under-provision of such public goods. Perhaps it is no surprise then that the discussion is a preoccupation with concrete problem solving.

Yet, critical voices have warned that the urgency of the problems in focus can provide a pretext for providers of public goods to intervene without local support in the name of the 'common good' and, in the extreme case, 'the survival of mankind'. The urgency of the problems addressed within the discussion of regional public goods thus call for strong democratic initiatives if the democratic potentials of this approach are to be realized.

If the current trend among international donors continues, international actors concerned with public goods will increasingly work on a regional level while democratic elections will continue to be held on a national level. The ultimate responsibility to represent the voice of the greater public falls on the national governments which are represented at the regional level. In addition to elections, civil society and market actors can provide alternative venues of influence at the regional level.

Although, non-state actors may complement other channels for popular influence, there is concern in the literature that the influence of these groups may become too strong which will lead to a biased situation. The venue for strategic maneuvering for organized interest groups is in part a consequence of the difficulty in determining what should qualify as a public good. The goal of interest groups is to place their members in a favorable position so that they can take greater part in the collective of consumers of the public good than in the collective of contributors to its production. They want to free ride. Put differently, they want to persuade the general public that providing the attracted good will indeed benefit all. Since the difficulties to define public goods at

the regional level can be greater than at the national level, due to e.g. diverse historical backgrounds and lack of forums to deliberate different views and opinions, interest groups are more likely to free ride on the regional level than on the national level.

In sum, although the regional public goods approach holds potential to extend democratic influence to include a wider range of processes affecting people, the move towards public goods provision on a regional level must be considered carefully. If not, the risk is that interest groups get an unjustified amount of influence over the initiatives of regional bodies. Chapter 5 outlined the argument that increased support of regional cooperation can provide an opportunity for nation-states subjected to globalization to pool formal sovereignty and regain real sovereignty. To the extent that this opportunity is accommodated and the national democratic system functions, increased cooperation on a regional level facilitates increased democratic influence by individual voters of developing regions. In a time when democracy has only recently gained footing at the national level in many developing areas, moving important decisions to the regional level might be untimely. It may be too much to ask from newly formed democratic systems to properly represent their voters at the regional level. In the absence of strong, well institutionalized forms for the voices of the general public, regional provision of public goods are potential sources of wealth for well-organized interest groups which may furthermore contribute to unequal influence.

## 7 Public goods and material inequality

As mentioned previously, the regional public goods approach may counteract the current trend of decreased funding of international development cooperation which addresses, among other things, material inequality. However, some researchers warn against such hopes.

One reason for this warning is that the causes of negative externalities often are found in areas populated by poor people. From a global perspective this area, of course, is the Third World. If forced to bear the cost of internalizing the externalities for the common good for everyone Kaul et al. (1999a) warn that “instead of acting as an ‘equalizer’, global public goods could worsen inequalities.” (p. xxix).

Kaul et al. (1999a) addresses this issue on the global level. However, there is no suggestion in the literature to why this inverse Robin Hood effect would not also prevail on a regional level. Surely the poorest have much to gain from diminishing regional public bads and increased provision of public goods. But attention must be paid to situations where the provision of regional public goods places more weight on the already burdened. One such example is when the taxation system is used to buttress access to, or provision of, public goods which only the more privileged groups of society can access. The internet is an example of this. Here, tax subsidized venues to access information in virtual reality hardly benefit the illiterate taxpayer. Similarly, as Russett and Sullivan (1971) show, a country joining others on a regional basis to develop an industrial process may find that its economy cannot support the industrial factors necessary to manufacture the product involved. States may consequently “find that the existence of a collective good is, in one sense, not ‘public’ as far as they are concerned since they are unable to consume that good for reasons unrelated to the good itself.” (p. 850). An inverse Robin Hood effect may be the result if such poor states are coerced into sharing the costs of production of regional public goods that they cannot use.

Turning a pure regional public good into a regional club good may circumvent the inverse Robin Hood effect as only consumers of the good will pay. However, this ‘solution’ may nevertheless lead to unwarranted exclusion and underproduction on a regional scale (see Sections 2.2 and 4.3).

## 8 Regional public goods as a venue for economic development

Many of the regional public goods identified in the literature are prerequisites for economic development. For example, regional security, eviction of cross boundary criminality, transportation networks, and education. The most compelling case is perhaps for regional public goods in the form of infrastructural arrangements facilitating a voluntary exchange of property rights, i.e. a functional market economy. Such regional public goods include foremost security and judicial systems functional on a scale equivalent to the regional sphere implied by the web of transactions. As Kanbur and his co-authors (1999) note, the need for public involvement to provide these public goods were advocated even by the laissez-faire economist Adam Smith. Market supporting investments may furthermore directly raise the level of income and subsequently provide ways to gain from other public goods such as scientific breakthroughs and the information technologies (p. 74ff).

Furthermore, as many developing regions suffer from lack of domestic savings and risk capital, regional public goods supporting the market economy may also increase the influx of foreign direct investments which will provide additional support for development (Botchwey 1999).

Other regional public goods such as reduced population growth, improved control over contagious diseases, and cut downs on toxic emissions will increase the welfare of the regions' inhabitants. This facilitates development as an increasingly healthy population and more educated women who participate in the labor force, can promote economic development and growth (Kanbur et al. 1999:74ff).

The arguments for regional public goods laid forth above are not exclusive for regional public goods but stand to support efforts to support global and national public goods as well. Nonetheless, three arguments can be identified as to how the *regional* approach to public goods in particular can inform the discussion on development. The first argument is that the regional level provides a benchmark in the need to transcend the predominant Westphalian nation-state approach to development. The second is in relation to the broader question of the nature of development and the need of political will to drive development. The third contribution is to provide increased security and stability which facilitates development (Hettne and Söderbaum 1998; Hettne et al. 1999). These arguments are sequentially outlined below. (The relationship between security and regional public goods is further analyzed in Chapter 9).

First, the criticism against the nation-state approach to development derives from an analysis of the role of the state in many developing areas. Referring in particular to an analysis of African states, Göran Hydén (1983) portrays countries of this region as "societies without a state". Similarly, Harbeson (1984) asserts that "the capability of existing nation states to minimally satisfy the political aspirations of nationalities and ethnic communities has never been more in question /than at/ this point in history". This analysis is supported by research done on other developing areas as well. In response to this criticism, the regional level can provide a dynamic level for development. It can do this because of the transnational nature of externalities as well as the cost reduction through exploration of economics of scale, lowered transaction costs, and increased efficiency through specialization.

Second, assessing the needs for political will, intention, and initiatives to provide public goods, the region is advocated as a locus from which a development strategy can be defined and implemented by political leaders. The significance of the latter argument must be seen against the widely spread criticism of national leaders. Repeated assessments show national leaders being occupied with other-than-development issues such as privately motivated power maneuvering and extraction of patronage (Bates 1999; Bratton and Van de Walle 1997; cf. Goldsmith 2000). The regional level may provide the institutional basis for a new generation of leaders. Nevertheless, the regionalist approach must convincingly show why and how the emphatic problems of corruption, patron-clientism, and similar forms of power abuse can be eschewed at the regional level. This is an issue that calls for empirical research on existing regional bodies.

Third, regional development cooperation may function as a battering ram against the much too familiar and very counterproductive pattern of civil strife, conflict and uncertainty that exist in many developing areas. Unrest in one part of a region may constitute a negative public bad for the entire region. Consequently, a momentum for stabilizing initiatives may develop among other members of the region to engage in peace enforcing activities which will buttress regional economic, social and political development. Chapter 9 examines further the relationship between security and development.

## 9 Regional public goods and security provision

In many ways, security provision is the perfect example of a public good. Security provision has immense positive externalities and strong non-rivalry features. Discussed within the boundaries of the nation state, providing security is seen a cardinal task for the public (see Table 3). Yet, security has clear regional propensities as many of its external effects spread across national boundaries. Improving security by joining potential adversaries in inclusive agreements and decision-making bodies is widely assessed as a natural way to expand beyond the nation state. Identifying the major challenges for regionalism, Hass (1958) accordingly points to the need to enhance regional security initiatives. Similarly, as illustrated in Table 3, Kanbur et. al. (1999) designates peacekeeping as one of their example of regional public goods.

The external effects of security take two different forms: a physical form, and a psychological form. Both the physical and the psychological external effects of security are best illustrated if we consider the case of insecurity. The physical externalities of insecurity are illustrated by the close connection between insecurity and lack of development. War has devastating effects on infrastructure, labor, and production sites that normally form part of the economic interactions of a region. As a result many scholars think that “development and peace are two sides of the same coin” (Hettne and Söderbaum 1999, p. 360).

The second kind of externalities from insecurity is psychological. Typically, the psychological response to insecurity overstates the actual risks associated with a situation of insecurity. Such overreactions often become self-fulfilling prophecies. The prophecies are fulfilled as the reaction to insecurity is determined by the amount of psychological unrest, not the underlying physical unrest. On an economic note, Botchwey (1999) exemplifies the psychological dynamic of insecurity as he outlines the rationale of foreign direct investors. Typically, the assessments of foreign direct investors are poor reflections of real world events. Turmoil in one part of a geographical region is interpreted as instability in the whole region. Consequently the external effects of local insecurity have regional impact and prevent development initiatives in the whole area. Similarly, Tabo Mbeki has pointed out that wars at the Horn of Africa influence the influx of foreign capital to South Africa.

Aware of the physical and psychological dynamics of security, the public good literature surpasses the traditional notion of security as a matter of military defense. Accordingly, a more encompassing perspective is proposed. Hamburg and Holl (1999) illustrate the complexity of such a security concept as they write about “the prevention of deadly conflicts”. Preventing deadly conflicts is the essence of the traditional security discourse. According to Hamburg and Holl, deadly conflicts can only be prevented if they are addressed in a comprehensive manner where traditional security is only part of the strategy. Addressing the provision of social “well being”, normative and judicial justice are other parts of the strategy needed to prevent deadly conflicts.

Similarly, Mendez distance himself from the strict concept of “defense”. He argues for a security discourse in terms of the concept of “peace”. In fact, Mendez states that when

security is discussed in the traditional way security can not be regarded as a public good. Mendez argues that military defense implies the construction of weapon systems which constitutes high marginal costs for people outside the protected community. A typical example is an arms raise where the provision of defense by one party leads to high costs to the second party. Together with the high opportunity costs of defense systems, Mendez argues that it is incorrect to talk about security as a public good as long as it is equated with “defense”. Accordingly, he opts for the concept of “peace” as a public good (c.f Russett and Sullivan 1971; see also section 3.3 of this review).

As noted in the beginning of this chapter, security as a public good hinges on logic of geographical inclusiveness. This is the reason for the urge by researchers to advance security arrangements to wider geographical areas. Many researchers propose that this advancement take the form of an ever-expanding security network connecting more and more areas and actors. There is no reason why this logic of inclusiveness should stop at the regional level. Thus, the literature in general view regional security initiatives in the context of global efforts to obtain peace (see for example Gwin 1999; Kanbur et. al. 1999b; Hamburg & Holl 1999). Emphasizing the interconnectedness between peace in different parts of the globe Mendez (1999) uses the metaphor of “building blocks”. Not attending to peace in one area implies taking out a building block from the construction of global peace which necessarily weakens the whole construction.

Multilevel security networks is thus advocated by many researchers as a response to the external effects of security. Nevertheless, multilevel security networks also contains the seed of a dynamic that may prohibit increased security. As discussed in Chapter 5, the transboundary approach to public goods contests the role of the nation state. According to the classical definition of a state, a state is the social actor upholding security in a geographical area. In fact, the provision of security is often seen as the *raison d’être* of the state. Thus, redefining the role of the state in relation to security provision is at the core of the discussion of the role of the state. In Chapter 5, we suggested that national power holders will find regional co-operation quite challenging in the perspective of national sovereignty. Consider now the reaction of national leaders in response to redefining the role of the state in relation to the *raison d’être* of the state. Clearly, regarding the state as merely a node in a multilevel security network can be quite difficult for national power holders. Violent reactions to demonstrate and reinforce power by current powerholders cannot be excluded in the case that the approach of multi-level networks is pursued (Hettne and Söderbaum 1999).

Section 2.3. identifies a functionalistic logic as underlying much of the literature on regional public goods. The functionalistic rationale suggests that the actor who is best equipped to supply security in a certain geographical region should do so. Clearly this actor is not always the state, nor any regional institution in which the state plays a role. On the contrary, traditional judicial systems, private armies, warlords, or simply gangs of thugs frequently handle security provision most efficiently. “Tribalism” and “balkanization” are concepts describing situations where those kinds of actors are responsible for the security provision. Typically, balkanized areas are highly volatile. Moreover, the fragmentization of such areas is in contradiction to ambitions of increased collective action within wider geographic areas. As a result, a functionalistic approach to security can lead to effects that prevent regional development (Hettne and Söderbaum 1999).

Clearly, the assessment of security as a regional public good is associated with a number of complications that must be considered. Adding to the complications mentioned above, Mendez (1999) points to the issue of a regional response when war occurs. Mendez's argument concerns the case when a neutral conflict mediator or intervening party is necessary to reinforce peace. Even if an actor is not directly engaged in a regional conflict, the web of social and economic relations making up a region will typically make every major actor in a region an ally of one of the conflicting parties. If such alignments take no other form, they may exist in the eyes of the party to which support is not explicitly declared. The logic that ensues is: 'if you are not my friend, you are the friend of my enemy and hence you are my enemy'. Since a mediator or intervening party's effect will be hampered if suspected of being an ally to one of the conflicting parties, it may be difficult to find a neutral mediator or peace reinforcer with substantial bargaining power within the conflicted region. So while the complexity of regional interdependence makes a strong argument for regional actors to take action against regional conflicts, real or imagined alliances stemming from this interdependence constitutes a stumbling block to mediate regional peace (Mendez 1999).

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## THE EXPERT GROUP ON DEVELOPMENT ISSUES (EGDI)

The Expert Group on Development Issues, EGDI, was established by the Swedish Government in 1995 with the objective of contributing to an increased understanding of development issues in a global context and to increasing the effectiveness of development cooperation policies.

The task of the EGDI is to initiate studies that will have the potential to make contributions to development thinking and policy making. In order to ensure a close relationship with research and policy communities around the world, internationally renowned members with extensive networks in their respective fields have been appointed.

The EGDI works independently of the Ministry for Foreign Affairs. A secretariat is assisting the group and a number of reference groups have the direct contact with the work in progress. An annual budget is determined by the Government.

The studies are published in two series: *EGDI Working Papers* and *EGDI Studies*.

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