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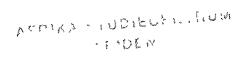
Social security in developing countries

Some theoretical considerations

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SOCIAL SECURITY IN DEVELOPING COUNTRIES: SOME THEORETICAL CONSIDERATIONS

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1. INTRODUCTION

As a concept social security has its roots in western society. In contemporary western societies it is common to indicate with social security the protection provided by (mainly) state institutions for individuals or social groups against the loss of earnings, which result from so called social risks (for example, old age, sickness, maternity, unemployment). Four major elements of this protection are income-tested social assistance, social insurance, categorical transfers, and health care (Atkinson 1988:100-123). Studies of social security in western societies focus on the implementation of these forms of protection, and their effects on socio-economic processes and relationships.

By interpreting the concept social security as described above, one could easily suggest that social security is a particular feature of the western society only. A study of, for example, social security in a developing country, would reveal that almost no social security exist in the sense described above. Anthropological studies, however, have made clear that also in non-western societies mechanisms exist to protect individuals or social groups against social risks. However, with our narrow interpretation of social security we would not label these mechanisms as social security. In order to make the study of social security in developing countries possible, we have to adapt our ideas on what social security exactly is and to change our analytical framework accordingly. The analytical framework has to be less specific, i.e., less oriented on western societies.

This paper discusses the concept of social security itself and important related issues. In Section 2 the definition problem of social security is discussed. A less western oriented definition is presented, which might facilitate the study of social security in developing countries. Section 3 justifies this wider definition by arguing that social security can be considered as a universal necessity, and as a phenomenon is not restricted to western societies. Section 4 discusses important related issues like "forms" and "principles" of social security, methods underlying social security systems and the main determinants of social security systems.

It is not the objective of this paper to present the definition of social security or the theory of social security. The main objective is to discuss

and place the concept of social security and related issues in a more general context, which would facilitate, then, the analysis of social security in developing countries.

2. THE DEFINITION OF SOCIAL SECURITY

The term "social security" has its origin in the welfare policy of President Franklin D. Roosevelt during the 1930's. In 1934 Roosevelt announced a program for "security against the hazards and vicissitudes of life" (Partsch 1985:14). In 1935 this announcement was followed by the "Social Security Act". In 1948 social security was officially proclaimed a human right in Article 22 of the General Declaration of Human Rights of the United Nations. In 1952 the International Labour Office (ILO) introduced an ultimate definition of social security in Convention 102. Nowadays social security is a major component of welfare policies of all industrialized countries.

Studies on social security in developing countries (e.g., Fuchs 1983; Mesa-Lago 1978; Mouton 1975) have frequently used the ILO definition of social security. But it became clear that this definition has some limitations when it is applied to the analysis of social security in developing countries. Nevertheless, the ILO definition will be the point of departure in Section 2.1., in which the ILO definition and its shortcomings with respect to developing countries are analyzed. Section 2.2. discusses the formulation of an alternative definition, which is thought to be more useful when analyzing social security in developing countries.

The title of the Social Security Act gives an indication of what was already understood under social security: "An Act to provide for the general welfare by establishing a system of federal old age benefits, and by enabling the several states to make more adequate provision for aged persons, blind persons, dependent and crippled children, maternal and child welfare, public health, and the administration of their unemployment compensation laws; to establish a Social Security Board; to raise revenue; and for other purposes" (quotation from Partsch 1983:15, footnote 10).

2.1. The ILO definition of social security

In 1952 the International Labour Office defined in Convention 102 social security as:

"the protection which society provides for its members, through a series of public measures, against the economic and social distress that otherwise would be caused by the stoppage or substantial reduction of earnings resulting from sickness, maternity, employment injury, unemployment, invalidity, old age and death; the provision of medical care; and the provision of subsidies for families with children." (ILO 1984:2-3)

This definition has been used during the last decades by both policy makers and researchers dealing with social security in western societies. The last decade an increasing amount of studies of social security in developing countries is published. Not only social security systems based on western models were studied, but also other forms and mechanisms got increasing attention.

With this studies became clear that the ILO definition was too limited to analyze non-western social security systems. Let us therefore discuss the major points from the ILO definition and relate these points to developing countries in order to highlight the main deficiencies of the definition.

The ILO definition states that social security is a form of protection provided by "society... through... public measures". In literature on social security sometimes is argued (Woodman 1988), that this part of the definition might draw the attention to state institutions of social security only. In studies on social security "society" is often understood as "state" and in accordance with this "public measures" are synonymous to state laws. Woodman (1988:70) argues that this limitation reflects the tendency for political discussion in western societies to exalt the state. By interpreting social security as a form of protection by the state or state-initiated organizations, several studies on social security in developing countries (e.g., Fuchs 1985; Mesa-Lago 1978; Mouton 1975) suggest that social

security is a scarce good to find in those societies. Fuchs (1985:35-7) estimates that 10 percent or less of the population in developing countries is covered by social security provided by the state. By giving such a limited interpretation of "society" and "public measures" in the ILO definition a whole range of mechanisms and forms of social security functioning at other levels (household, family, community, etc.) are overlooked. Most people in developing countries obtain their social security at these other levels.

Although some studies suggest that the ILO definition itself attracts attention to state-organized forms of social security we think this is rather an interpretation of the authors themselves. The reference in the ILO definition to society and public measures is not a deficiency. "Society" can easily be understood as a constellation of families, kingroups, clans, villages, and a state; and although "public" in economic analysis is part of the public-private dichotomy in which "public" often stands for state organized or state initialized, "public" can also be interpreted as "public action" (see, for example, Drèze and Sen 1991), which can be found at all levels of society. Until sofar the definition of the ILO does not seem to limit the study of social security in developing countries.

The ILO definition continues with the statement that social security protects against social and economic distress. What is "distress"? In industrialized countries it mostly indicates the exceptional situation of being in danger of falling below an acceptable and normal minimum level of social and economic well-being. The measure of this level is relative to the standard achievable by many in society. In developing countries this level is usually very low, and "distress" must be understood then as "destitution", i.e., a condition below the standard necessary for survival as a member of society (Woodman 1988:70). The point made here is that social and economic distress may have a different meaning in developed and developing countries. We will return to the valuation of distress in Section 2.2.

The ILO definition also indicates that the major cause of social and economic distress is the loss of earnings as result of a core group of risks.

If we look at the loss of earnings two points can be made. At first sight earnings can be understood as monetary earnings. However, in developing countries far more people are dependent on activities which generate non-monetary earnings. All forms of income-producing activity are therefore in issue. It would be desirable to make this clearer in the definition. Secondly, social security only seems to apply to persons who suffer social and economic distress as result of losing earnings. It does not meet the case of a person who loses an "unearned" income, that is, an income not attributable to a continuing economic activity on their part. The definition ought to meet not only the cases of those who lose an incomeproducing activity, but also of those who are unable to begin any (Woodman 1988:72). In these respects the ILO definition is clearly related to a particular socio-economic order, i.e., that order that is assumed to make provision for most members of society. In developing countries the existing social orders vary and are changing rapidly. Any reference to loss or lack of earnings might be better avoided, then.

With respect to the causes of loss of earnings the ILO definition refers to a core group of risks. Certainly these risks can be found in all countries, but for developing countries other risks are equally important. Because of technological innovation and progress industrialized countries have largely been able to eliminate weather-induced and environmental risks, like drought, erosion, floods, etc. However, for people in developing countries these risks are a persistent danger for their earnings. It can be discussed if these kind of risks should not be included when looking at developing countries. It might even be better to avoid any reference to any risk, as this might differ with each society studied. We will also turn to this point in Section 2.2.

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A last remark is concerned with the last two phrases of the ILO definition, the provision of medical care and subsidies for families with children. Both seem to be in contradiction with the former phrases. In the first part of the definition protection only seems to apply to those who lost earnings, while the second part seems to apply to all people. Both the provision of medical care and of child maintenance are not limited to

families which are themselves at risk. Here the objective is different from the protection against distress. It is a social objective in which the ILO gestures towards the goal of equalisation of material conditions.

In sum it can be concluded on the one hand that the ILO definition contains elements that are broad enough to cover the prevailing situation in developing countries. It is rather the interpretation of concepts like "society", "public", and "distress" by western scholars that restrict studies than the terms themselves, which can be considered broad enough. On the other hand the second part of the definition, which refers to loss of earnings, a core group of risks and the provision of medical and child care, contains some biased, and in the latter cases, some contradictory elements and reflect a particular socio-economic order. These underlying assumptions restrict the analysis of social security in developing countries, where other, sometimes rapidly changing, socio-economic orders are to be found, with different uncertainties and different priorities.

A more general definition is needed, therefore, when studying social security in developing countries. This is discussed in the following section.

2.2. An alternative definition of social security

When studying social security in developing countries it is not so difficult to indicate the weak points of the ILO definition of social security. It is, however, far more difficult to find a good alternative which reflects both the situation in developing countries and at the same time is restrictive enough to define social security as a research object.

From the previous section the conclusion may be drawn that the definition of social security in developing countries should be dissociated from any specific type of normative regulation or transfer of goods and services Von Benda-Beckmann (1988:10) suggests that we must use the term social security to indicate, perhaps illuminate, a field of social problems, rather than looking for clear boundaries of the concept. With social problems Von Benda-Beckmann means that people in developing countries suffer from insecurity, from uncertainties: whether or not they will have enough to eat tomorrow, have a roof above their head, be cared for when they

are ill, etc. In the most general sense, then, social security refers to "the efforts of individuals, kingroups, villages and state institutions to overcome these insecurities" (Von Benda-Beckmann 1988:10).

According to Von Benda-Beckmann (1988:10) the term social security can thus be taken to refer to social phenomena on a variety of levels. On one level it indicates values, ideals, ideologies, and, in more concrete form, policy objectives. Different agents define social security differently. It does not make sense to take one such definition. One should rather investigate the different definitions and relate them to the problem of social security. The second level is the level of institutions. Also here we encounter great variety. In some societies (industrialized countries), specific institutions have been build to provide assistance to the needy, in other societies no specific social security institutions have been differentiated from social organization in general. We have to analyze these differences, explain them and indicate their significance. And at the third level, at the level of practical collective and individual action, social security colours the most varied sorts of social processes. Building a house, as category of behaviour, is not as such a form of social security provision, but building houses for the poor might be considered as such.

The definition of Von Benda-Beckmann is wide but allows to distinguish more sharply the unknown areas and conceptualizations needed (Von Benda-Beckmann 1988:11). However, it is argued here that the definition is too wide to be of practical use when doing research on social security in developing countries. The danger might arise, because of very low standards of living in developing countries, that all institutions and mechanisms (differentiated or not from social organization), that all collective and individual action, can be interpreted as social security. In this sense, then, a study on social security leads to a study of society in all its facets and cannot be considered as a separate research object any more.

In his theoretical study on pre-industrialized societies Partsch (1983:47) suggests that a definition of social security should stress the function of social security for individual and society. Although Partsch's study refers to western pre-industrialized societies (what he calls archaic and feudal

societies), his study gives a contribution that is important for the study of developing countries also, without adopting an evolutionistic approach. Like most scholars Partsch rejects the definition of social security that refers to specific institutions or particular forms of action and risks as these are highly dependent on the society studied. Such a definition cannot be used to study social security in different societies and to compare different societies.

Partsch argues that the function of social security can be derived from the term "social security" itself. The function of social security has apparently something to do with an "insurance function". What is the object of insurance, then? The answer is "the standard of living" of individuals or social groups. The concept of standard of living itself is a controversial one. If the object of insurance is the standard of living, then the standard of living must be operationalized or better still "valued". A thesis can be written on this subject. We have different priorities here, but will pay brief attention to this valuation problem.

Drèze and Sen (1991:5-10) distinguish three valuation methods of standard of living. The first approach is the utilitarian notion of value, derived from mainstream welfare economics. It sees value only in individual utility, itself defined in terms of some mental condition, such as pleasure, happiness, desire-fulfilment. This subjectivist perspective is, however, very misleading as it may fail to reflects a person's real deprivation. For example, in times of long-standing deprivation a person is not going to sigh all day and complain about his or her miserable situation. He or she will try to find pleasure in some small mercies. When a metric is used, then, like pleasure, someone's real deprivation may be concealed.

The second approach concentrates on a person's real income or command over essential commodities. An example within this approach is the "basic needs approach", which concentrates on the requirement to provide some specified minimal amounts of necessary goods (such as food, clothing, shelter, etc). The disadvantage of this approach is that the ability to convert commodities into personal achievements may vary greatly between one person and another, and also between communities. Focusing on

incomes for analyzing poverty and deprivation has the same problem of variability, because the value of income lies in its use for commanding commodities (Drèze and Sen 1991:6). Moreover, there is an additional problem of variability in the relationship between income and commodities. Market limitations can cause variations in the power of income to establish command over goods and services (Drèze and Sen 1991:6). Therefore the problem of conversion of commodities into living standards is compounded by the problem of conversion of income into commodities. The third approach comes from Drèze and Sen themselves and they propose that the focus variable for analyzing quality of life in general or deprivation and poverty in particular, is the capability to perform certain basic functions. If life is seen as a set of doings and beings that are valuable, the exercise of assessing the quality of life takes the form of evaluating these functionings and the capability to function. The task is that of evaluation of the importance of the various functionings in human life. The functionings have to be examined, and the capability of the person to achieve them has to be appropriately valued (Drèze and Sen 1991:8). Drèze and Sen (1991:9) conclude that the ultimate analysis of quality of life in general or poverty in particular has to be with the deprivation of living conditions, for example, lack of nourishment (rather than of the

Drèze and Sen (1991:9) conclude that the ultimate analysis of quality of life in general or poverty in particular has to be with the deprivation of living conditions, for example, lack of nourishment (rather than of the income to buy nutrients), exposure to preventable diseases (rather than inability to buy medicine), and so on. Poverty or deprivation is the failure to have the ability to achieve minimal levels of certain basic functionings (such as being adequately nourished, minimally sheltered, and so on), and that failure would have to occupy the centre of the stage (Drèze and Sen 1991:9).

Returning now to our discussion of the function of social security, we can say that the security function of social security with respect to the standard of living might be twofold: the first one is to prevent deterioration of the standard of living, i.e., the protection of an individual against a decrease in his or her abilities to achieve minimal levels of certain basic functionings. Moreover, a function of social security might be to increase someone's standard of living, if a person's standard of living is below a certain minimum standard of living. In other words, social security can

also have the function to increase someone's abilities to achieve certain basic functionings.

In the literature (Burgess and Stern 1991; Drèze and Sen 1991; Atkinson 1989; Partsch 1983) this double function of social security with regard to the standard of living is emphasized. It is important to distinguish these two functions, which can be labelled as "protection" and "promotion" (Drèze and Sen 1991:3). The protection function is concerned with preventing a decline in living standards in general and in the basic conditions of living in particular. This contrasts with the function of enhancing normal living conditions and dealing with regular and often persistent deprivation. This promotional aspect of social security is more ambitious in wanting to counter problems that have survived for thousands of years. The implication of this twofold function is important for strategic issues.

When we read the ILO definition of social security carefully the protection and promotion function can be found. The protection element can be found in the part of the definition where social and economic distress (i.e., fall of standard of living) has to be avoided. A fall of a standard of living (decline of capabilities to achieve certain basic functions) can occur by events like sickness, invalidity, unemployment, employment injury, sudden death of household member, and old age. The promotion element can be found in the provision of medical care and subsidies for families with children. This is promotion of the existing standard of living as the capabilities of family members to achieve certain basic functionings are extended.

When millions of people live in a continuing situation of severe deprivation, i.e., a situation in which they do not have capabilities to achieve certain basic functionings, the promotional function of social security seems to be more important than the protection function, although the latter is not absent in situations of severe deprivation. Even when living in deprivation there might be some social security to prevent a situation in which people fall further and further as result of particular contingencies. When we speak of social security we have both protective and promotional social security in mind. If we would stop our discussion of the definition of social security, the definition would be as follows: social security is the protection against a fall in the standard of living of individuals or social groups and/or the promotion of those standards of living of individuals and social groups, which are below a certain minimum level.

This definition only highlights that social security "insures" the standard of living by protection and promotion. The protection and promotion of standards of living can be reached, however, by all kinds of measures and strategies but also by general developments like climatic change and economic development. Moreover, also the individual him- or herself is sometimes able to protect or promote his or her own standard of living. Is all this included then in the social security agenda? This is a rethoric question.

By giving a meaning to "social" in the term "social security" and incorporating this meaning in the definition we might be able to limit the "actions" that fall under the umbrella of social security.

"Social" is a term with a lot of meanings. It is common use to indicate with "social" an act or mentality that is directed to the well-being of one's fellow-men. According to Partsch (1983:49) the term "social" in social security originally may have had such a meaning. Social policy, of which social security is a part, originates from criticisms on the miserable conditions in which the industrial proletariat had to live during the last century (Partsch 1983:49). It is not very realistic to assume that this kind of behaviour is still meant with "social" when speaking about "social security".

It is more likely that the meaning of social is in essence "societal" or "by society". As we saw in Section 2.1. the ILO also interpreted "social" to mean "by society" ... "through a series of public measures". It was indicated that terms like "society" and "public measures" are often interpreted as "state" and "measures by the state" respectively. Analogous to the ILO we also indicate with "social" "by society", but here the term "society" is not applied to refer to state institutions only. We prefer to use the term in a much broader sense, indicating a constellation of families, kingroups, clans, villages, and a state. Apart from this, we think that a social security

definition for developing countries should not mention references to public or any other specific measures. Although specific social security measures do exist in developing countries, most people depend for their social security on social processes or institutions that cannot be differentiated from social organization in general and, therefore, these processes and institutions cannot be labelled as explicit "social security measures". The implicit contribution, however, of these processes and institutions to the double function of social security (the protection and promotion of the standards of living of individuals or social groups) should make them part of social security analysis in developing countries. Therefore, it seems better to avoid any reference to specific measures in a social security definition for developing countries.

In sum, we give the term "social" a broader meaning than the ILO did, but still our interpretation is somehow restrictive. First of all, it excludes measures at the individual level from being included in the analysis of social security. An individual might well be able to prevent him-sor herself against a fall of the standard of living by taking his or her own measures. By referring to society, measures at the individual level are excluded and do not fall under social security. Secondly, the restriction to society excludes a wide range of other factors (for example, technological innovations, industrialization), which may contribute to the objective of social security, but cannot be considered as part of a social security agenda (Burgess and Stern 1991:43).

Finally, it can be asked if a definition of social security should refer to specific contingencies. Previous critics indicate that the incorporation in the definition of specified contingencies is not desirable. The multitude of contingencies that are prevalent in developing countries will make it impossible to mention them all in a definition of social security. In fact all contingencies are under issue, as far as the contingency influences someone's standard of living negatively and the individual is not able to cope with the consequences of a particular contingency him- or herself. It is proposed here to summarize contingencies under the head of "temporary adversities", which is considered broad enough to cover all kinds of contingencies. Moreover, in developing countries millions of people have

a very low standard of living as result of persistent deprivation. This standard of living is far below an acceptable minimum standard of living and is mostly not the result of temporary adversities, but a consequence of long standing deprivation.

All what is said in this section leads to a definition of social security that we want to present here:

"social security is, firstly, the protection by society of individuals or social groups against a fall in their standards of living as result of temporary adversities and, secondly, the promotion by society of those standards of living of individuals or social groups which are below an acceptable minimum level".

The definition presented should not be considered as the one and only definition of social security. But when studying social security in developing countries this definition has some advantages over the ILO definition. Firstly, our definition stresses more clearly the double function of social security, i.e., the protection and the promotion of standards of living. Especially when studying developing countries with millions of people living below a subsistence minimum, this distinction can be important. Secondly, the definition does not mention a specific core of contingencies. The occurrence of contingencies and their frequencies and impacts differ per society. Moreover, in each society views differ on what kind of contingencies should be covered by a social security program. Thirdly, the definition attaches less weight to the state as the sole provider of social security. In our view many institutions and social processes in society contribute implicitly or explicitly to the ultimate goal of social security and these can be found at all levels of society.

In sum, in our opinion the presented definition is less oriented towards a specific socio-economic order. When applying this definition of social security it will be easier to analyze social security in developing countries. Of course, we acknowledge that definitions of social security contain many subjective elements and the remarks of Von Benda-Beckmann should be borne in mind. Different agents within a given society will define social

security differently according to their own position in society. What ultimately in a given society is considered as social security or which contingencies should be covered by a social security program is mostly the outcome of a political process. The role of pressure groups, public action and political processes should, therefore, not be underestimated when studying social security in a given society (Drèze and Sen 1991; Mesa-Lago 1978).

3. SOCIAL SECURITY AS UNIVERSAL NECESSITY

In Section 2 we concentrated on the definition problem of social security. We argued that most definitions used by scholars reflect the situation in industrialized countries. Our definition is meant to be much broader and can be applied on developing countries too. However, by defining social security within a broader context, we assumed implicitly that social security can be found in all kind of societies. Recent studies (Ahmad et al. 1991; Benda-Beckmann et al. 1988; Bossert 1985; Partsch 1983) show that also in non-industrialized societies forms of social security exist, often different from those in the industrialized societies. With Partsch (1983:54) we want to argue that social security can be found all over the world, because it is an universal necessity. It remains, however, difficult to prove this assumption inductively, because it is impossible to study all societies at all times. Moreover, one deviating case would force us to reject the assumption immediately.

To make the assumption plausible Partsch (1983:54) suggests to follow the deductive route by formulating conditions that require the existence of some form of social security. If empirical research confirms these conditions with an acceptable certainty, the universal necessity of social security can be derived from the ubiquitous existence of these conditions. Social security can be seen as an universal necessity if, firstly, all over the world, at all times, the standard of living of people is threatened by risks

² What exactly is understood in this paper with "forms of social security" is explained in the next section.

or uncertainties, and secondly, all over the world, at all times, the possibilities of people to protect themselves individually against the consequences of an actual occurrence of a risk or uncertainty are insufficient.

For the first condition for social security to be an universal necessity, the universal vulnerability of people for risks, Partsch (1983:55-7) uses insights from "philosophical anthropology" to underpin this condition. In this view man is considered as a being of nature which is relatively vulnerable in comparison with other beings (like animals, plants, etc.). The human being has less specialized organs than other beings and lack of protective institutions would make man relatively vulnerable then. Without any artificial means of help man would not have existed for a long time. But, as philosophical anthropology argues, because people were able to make instruments and tools to replace missing organs (technological progress) and because of the building of social and organizational institutions (social progress) the human being was able to change the natural environment into an artificial environment (culture) in which man is less vulnerable and consequently viable. Notwithstanding this technological and social progress, mankind is still threatened by risks like sickness, death, etc.. History shows that mankind has not been able to eliminate all risks from its environment.

However, the universal threat of risks does not necessitate social security. It is the inadequacy of individual precautions that do necessitate social security. People are not able to bear all consequences of risks that endanger their standard of living themselves. The validity of this condition can be proved when we ask ourselves what the conditions are that would enable a human being to protect him- or herself fully against risks. These conditions are threefold.

Firstly, an individual must have command over commodities that he or she does not need for subsistence needs; this requires the production of a surplus. Secondly, an individual must have free command over this surplus, i.e., an individual is not forced to give the surplus to others (by tax levies, etc.), there are no traditions or norms that restrict the use of the surplus, and the use of the surplus does not require the permission of others. Thirdly, the means over which can be freely commanded must not lose their value or utility in time and must be at a person's disposal immediately.

Besides, even when these conditions are fulfilled, the possibilities of individual precautions are limited by the fact that from an individual perspective it is not always possible to foresee if a risk actually will occur (for example, illness, accident), when it will occur (for example, death of family member) and how long the consequences of a risk occurrence will last. Only complete absence of uncertainty would remove these constraints. However, according to a common insurance principle, hundred percent certainty never exists. In order to make individual precautions sufficient to meet the consequences of the risk occurrence, then, these precautions should be based on the maximal possible harm that can occur, and not on a mean possibility. The higher the uncertainty about the risk occurrence, the moment of occurrence and the duration of the consequences, the less appropriate and limited are individual precautions.

It is obvious that the fore mentioned conditions to make individual precautions sufficient in case of risk occurrence are not fulfilled in real life. This implies that an individual cannot protect himself against all risks individually, and that it might also not be economically efficient for an individual to do so.

In summary, the universal existence of risks threatening mankind, and the insufficiency of individual precautions to meet the consequences of these risks, seem to make social security an universal necessity. By answering the question why social security can be considered as an universal necessity, we have justified the choice for a much broader definition of social security as presented in Section 2.

The universal necessity of social security does not automatically imply, however, that social security is considered as desirable in any given society and that forms are developed that meet the objectives of social security. In other words, nothing is said thus far on the question whether or not it is possible in a given society to develop institutions, mechanisms, processes, that meet the objectives of social security. Several conditions have to be fulfilled to make this possible, and the actual forms of social

security are influenced by several determinants. These conditions and determinants will be subject of discussion in the next section.

4. SOCIAL SECURITY SYSTEMS: METHODS, FORMS AND DETER-MINANTS

In previous sections we were concerned with the definition of social security and indicating its universal necessity. Defining social security and stating its universal necessity is one thing; the realization of social security is another one. The efforts that are taken to realize the objectives of social security can be referred to as "social security system". With Freiburg-Strauss and Jung (1988:229-230) we will use the term "social security system" to refer to all measures and strategies by society that, in their entirety, contribute to the objectives of social security, i.e., the protection of individuals or social groups against a fall in their standard of living as result of temporary adversity and amelioration of low standards of living of individuals and social groups resulting from long-standing deprivation. It should be clear that social security systems differ considerably between societies. It is therefore almost impossible to analyze social security systems without referring to a particular society. The aim of this section is to discuss the basic elements of social security systems.

The theoretical points made in this section are mainly derived from Partsch (1983), which is one of the few studies that intends to develop a theoretical framework to analyze social security systems in non-industrialized societies. Methods of redistribution underlying social security systems will be discussed in Section 4.1. Section 4.2. will deal with principles and forms of social security systems, while Section 4.3. will briefly indicate the main determinants of social security systems.

4.1. Methods of redistribution and social security systems

The inadequacy of individual precautions against contingencies (see Section 3) does not mean that social precautions are automatically there. Both the emergence and existence of social precautions, i.e., a social security system, depend on several conditions. We can find such conditions when we look at the theoretical possibilities of realizing the objectives of social security.

Essentially there are only two possibilities to protect an individual against a contingency. Firstly, by trying to avoid a risk occurrence and secondly, by eliminating or easing the consequences of a risk. We have already seen in Section 3 that the elimination of a risk occurrence is difficult to attain. In industrialized countries fast technological and medical progress succeeded in reducing the occurrence of mostly weather-induced risks and medical risks (epidemics, for example). Nevertheless, industrialized countries did not succeed in eliminating all kind of contingencies. For developing countries, with lower levels of technological and medical development, the elimination of risks occurrences is even more difficult and is therefore not a likely solution for the protection of an individual. In both developed and developing countries, therefore, we depend on the elimination or easing of the consequences of a contingency by individual and social precautions. As we are concerned here with social precautions only, the question is how these social precautions can be realized.

In Section 2 we argued that risk occurrences often have consequences for an individual's standard of living. These consequences of a contingency for someone's standard of living (i.e., ability to achieve minimum levels of certain basic functionings) are mostly negative and also felt as such by the person in question. A recuperation of the initial standard of living requires, economically speaking, means (goods, services or money).³ Cru-

³ It is not stated here that the use of means is always sufficient to recuperate an individual's standard of living. Drèze and Sen (1991:9), for example, indicate in the case of poverty relief that poverty is often understood by policy makers as a problem of income shortage. Promoting higher incomes is considered, then, as the solution for poverty. But other reasons than shortage of income might cause poverty, for example, unequal distribution of income within households, gender position, etc. The same argument can be applied on our discussion. The use of means like goods, services and money do not always guarantee the recuperation of the initial standards of living of individuals, although its necessity cannot be denied.



cial is here that it concerns an extra need, a need that was not there before a formerly uncertain event really happened. Given the universal scarcity of income, goods and services on the one hand and unlimited consumer needs on the other hand, this extra need can only be satisfied by abstaining from the satisfaction of other needs (Partsch 1983:60). Resources, originally planned for satisfaction of certain needs, must be directed to the fulfilment of certain other needs that were not there before. In order to let this process take place a redistribution of available means is required. Means have to be redistributed among needs to be satisfied and among individuals.

Partsch (1983:60) distinguishes three modes of redistribution: intertemporal, interregional, and interpersonal redistribution. With intertemporal redistribution is meant redistribution by using means that were accumulated in the past (reserves) or means that are obtained by taking an advance on future means (borrowing). Interregional redistribution takes places when a surplus of means (i.e., excess above certain defined minimum level of means available) in one region is transferred to a deficit region. With interpersonal redistribution part of available means belonging to a person not affected by a risk is transferred to those who were affected.

These general modes of redistribution can also be used as instruments for a social security system to solve its problem (how to fulfil an additional need for means as result of a contingency). Whether or not social security systems can be based on one or more of these modes of redistribution depends on the extent to which conditions are fulfilled to let a particular mode of redistribution function. Let us have a closer look at these conditions, then.

Intertemporal redistribution

Intertemporal redistribution requires in the first place that production and consumption of means do not take place in the same period. This requirement leads to the conclusion that it must be possible to store means in order to make intertemporal redistribution possible. If we distinguish between goods, services and money we can easily see that the possibility

of storing means differs according to the kind of means we are talking about.

When looking at developing countries one of the goods most produced and consumed is food. However, especially in rural areas, it is extremely difficult to store food and related products. Low level of technological development and lack of storage facilities hamper the possibility of intertemporal redistribution of these goods. In many developing countries keeping cattle is a common practice and can be an example of storing durable food. However, besides being consumer good, cattle is also often used as production input. Therefore, the use of cattle in times of extra consumption needs is limited, because otherwise future subsistence could be highly endangered. Services, as another form of means, are not suitable for intertemporal redistribution simply because the production (delivery) of services cannot be separated in time from its consumption. Money, the third means, has facilitated intertemporal redistribution. For an individual or a household, for instance, the moment of generating an income and consuming it can be easily separated by saving or investing in durable items. Money is also easy to take an advance on. But in most developing countries, especially in the rural areas, financial institutions and markets are not well developed, which hampers the possibility of redistributing money in time. Much literature can be found on this subject (see, for example, Adams et al. 1984, Von Pischke et al. 1983). We will not go into detail here. The point made here is that the existence money creates more opportunities for intertemporal redistribution to be an instrument for social security systems. However, the administrative and organizational skills that are required then are very high and most developing countries are unable to fulfil these requirements. This makes that intertemporal redistribution is less likely to be found as instrument of social security systems in developing countries.

Interregional redistribution

Interregional redistribution involves the movement of means from a region with a surplus of means to a region with a deficit. Two important prerequisites for interregional redistribution to take place are a good

transport system and a good communication network. The transport system is of course necessary to transport surpluses to the deficit areas, communication networks are necessary in order to identify quickly surplus and deficit areas, and to let the necessary means arrive in time. Drèze and Sen (1991), for example, stress the importance of an early warning system in case of regional food shortages, which could highly reduce the damage caused by such regional shortages. In many developing countries a good transport and communication system is absent. It is therefore not likely that regional redistribution can be a appropriate method of social security systems.⁴

Interpersonal redistribution

One of the features of interpersonal redistribution is that it requires to a much lesser extent the conditions, necessary for redistribution in time or space. This makes interpersonal redistribution, as method of social security systems, more appropriate in developing countries than intertemporal and interregional redistribution. One should expect, then, in most developing countries social security systems based on interpersonal redistribution as the main method for the requisite redistribution of means. It is not stated here that interpersonal redistribution is automatically the method if the conditions for intertemporal and interregional redistribution are not fulfilled. But, as we will see in this section, in developing countries the conditions for interpersonal redistribution to be a method of redistribution are easier to accomplish than for intertemporal and interregional redistribution. This might lead to the hypothesis that technologically and economically less developed societies will have social security systems mainly based on the method of interpersonal redistribution.

One of the first economic conditions for interpersonal redistribution to be a feasible instrument for the distribution of means within social security

⁴ This statement refers to regional redistribution within a country or society. At international level regional redistribution is often used as method for social security systems, for example in the case of emergency help between industrialized and developing countries.

systems is that the production and the consumption of means are separate processes at the individual level (Partsch 1983:63). This implies that some kind of division of labour must exist. Although the degree of division of labour in developing countries is lower than in the industrialized market economies, some division of labour exists, mostly according to sex and age.

Another important economic condition for interpersonal redistribution to take place is the ratio producers versus non-producers. Each society consists of a number of producers and non-producers (among others, mostly children and elderly). The survival of the non-producers depends heavily on the number of producers that can produce more means of subsistence than necessary for their own consumption. To guarantee each member of society an acceptable standard of living, then, the ratio producers to non-producers cannot be too low. Economic development, attended with a productivity rise, allows a higher number of non-producers and consequently a lower ratio.

The importance of the ratio producers/non-producers can be shown when we look at what happens when (as result of a contingency) the number of non-producers rises. If the objective is to maintain the standard of living of non-producers the standard of living of producers will fall (unless the labour productivity is increased), because of a higher burden for each producer. The argument goes the other way around if the objective is to maintain the standard of living of the producers: the non-producers will suffer then. A good example of the importance of this ratio is the increasing concern in industrialized countries with the ageing population, causing a situation in which a decreasing number of producers have to carry the burden for an increasing number of non-producers. It should be clear that depending on the level of economic development, a minimum value of the ratio producers/non-producers is necessary to guarantee an acceptable minimum standard of living for each member of society.

The existence of division of labour and a minimum amount of producers compared to non-producers are two important economic conditions for interpersonal redistribution. However, because interpersonal redistribution involves the transfer of means from one individual to another, Partsch

(1983:64) states that also socio-structural, institutional and normative conditions have to be fulfilled to make interpersonal redistribution an appropriate method for social security systems. This requires a more detailed analysis of interpersonal redistribution as method for social security systems.

Within social security systems interpersonal redistribution can be an instrument to balance risks and needs within human groups or societies. The question can be asked, then, under what conditions this balancing will take place, as we cannot assume that in each spontaneously formed human group such a balancing will take place.

Zacher (1979) labels a group that reaches social security by interpersonal redistribution as a solidarity group or risk-group. This group can be formed when individuals are confronted with the threat of one or more common contingencies and the members want to take common precautions against this threat. The extent to which a risk and need balancing in a solidarity group takes place depends on four factors, then: the size of the group, the composition of the group, the durability of the group, and the principle of redistribution within the group.

The size of the group is important because it determines the burden that will fall on each single member when one or more group member(s) fall(s) short of particular needs. The more members the group has, the lesser will be the burden for each single member when one of them falls short. A minimum size for a solidarity or risk group would be difficult to estimate, but it can be suggested that the size must exceed those of a nuclear family (husband, wife and children) (Partsch 1983:65-6). On the other hand the group cannot be too large. Platteau (1991:136)) refers here to the incentive problem: "any kind of collective action - including social security arrangements - is always under serious threat from incentive problems". These problems actually arise when information is costly and asymmetrically distributed, and they usually take the form of moral hazard and adverse selection (Newbery 1989:278-9; Binswanger and Rosenzweig

1986:507; Newbery and Stiglitz 1981:165-6). These problems can only be avoided when elaborate record-keeping is possible and transaction costs of providing insurance, including social security (administrative and information costs) are relatively low (Platteau 1991:136). We have already argued that administrative systems in developing countries are usually not well developed and organized. Platteau (1991:137) states that the problem of asymmetrical information is one of the reasons why social security schemes in developing countries can be found mainly at the level of small communities and social groups. The cost of information collection and contract enforcement is reduced, then, to manageable levels. Historical ties and personalized relationships tend to allow further reductions of information costs. Moreover, given the interlinked nature of many transactions and the lack of alternative possibilities (other communities or social groups being themselves tightly-knit social entities with entry barriers), the cost of free-riding or rule-breaking tends to be so high that even implicit or tacit commitments can be considered as more or less self-enforcing.

For a group to be a solidarity group in which balancing takes place between risks and needs, the composition of the group is another condition. The composition must be such that at all times there are enough members who can give sufficiently of their own means to members in need. This implies a composition of the group by which not all members are affected by the same risk at the same time (so called collective risks). To give an example: it does not make much sense for farmers living in an ecologically uniform area and carrying out activities which are similar from a risk point of view to pool or share their risks. If they are all maize

⁵ In the economic theory of insurance, moral hazard arises 'when an agent who obtains insurance has an incentive to take less care to avoid the contingencies which give rise to claims'. As for adverse selection, it occurs 'when the insurance company cannot distinguish between agents who have different probabilities of claims, and hence must offer all the same contract', with the result that the contract only appeals to (and adversely selects) those belonging to a comparatively high-risk category (Newbery 1989:278). Both problems arise from 'asymmetric information' regarding the relevant personal characteristics of the agent seeking insurance.

growers, for example, a drought or maize disease will affect them all to the same extent. No one is able then to help each other. A fundamental theorem of the economic theory of risk and insurance deals with this so called covariance of risks. The theorem is that the cost of an additional risk depends on its covariance with existing risks: the cost will be higher the stronger the degree of positive variance, whilst negatively correlated risks will have the effect of reducing the total cost of risk bearing. Consequently, there are potential gains from trade in risk when incomes and contingencies are uncorrelated while, if all agents face similar risks, risk cannot be reduced much by trading between the participants (Platteau 1991:139; Newbery 1989:270-2; Newbery and Stiglitz 1981:165). To continue with the example of the farmers: the high covariance of yields accounts here for the difficulty of providing insurance against collective risks, that is, risks which affect all the participants simultaneously. The counterpart is when farmers, carrying out different activities from a risk point of view, pool their risks; a contingency would not affect all farmers to the same extent and enough farmers will be left to supply means of subsistence to help the needy. In sum, when covariate risks exist social security by interpersonal redistribution is not possible (or it is possible, but no one will enter the scheme). The composition of the group, given a particular risk, is therefore important for interpersonal redistribution to succeed as method of social security.

The durability of a solidarity group is another important condition. For all members it must be certain that the group will continue to exist when the contingencies occur and during the whole period in which consequences are felt as result of the contingency. Interpersonal redistribution takes place, when it is certain that the size and composition of a group or community will exist in future. Especially solidarity groups that are able to replace departing members over time are suitable for interpersonal redistribution as method for social security. Extended families or clans, for example, are perfect solidarity groups from this point of view.

The former three conditions, size, composition, and durability are necessary but not sufficient conditions. If we want a group to be a solidarity or

risk group a principle must be present that obliges members to support other members when necessary. There must be norms or values that force members to redistribute means from those who have to those who have not. The existence of such a "normative insurance" (Partsch 1983:67) is a perquisite because it cannot be expected from the individual members that they will contribute and contribute sufficiently at times that this is needed. Customary rules, moral principles and community norms constitute, therefore, a powerful means of assuring each participant that cooperation will ensue and the obligations created will be enforced (Platteau 1991:139). When a group lasts long enough it might be argued that the necessary redistribution of means will take place, as for the individual contributions and receipts will balance in the long run. But such a balance can only be expected with certainty when a far reaching equivalence between contribution and benefit is secured, like with private insurance (Partsch 1983:67).⁶ The realization of this equivalence principle is in developing countries not possible because some important insurancetechnical assumptions are not given (homogeneous and estimable risks; application of the law of big numbers). Moreover, the use of the equivalence principle is limited when it leads to situations that are in conflict with other (often more important) values and norms of a group or society. The equivalence principle would, for example, lead to lack of protection for those who cannot contribute sufficiently. When the objective is also to create a social or needs balance the equivalence principle should be replaced or at least be strengthened by another principle, for example, the principle of solidarity.

In this section we argued that the problem of a social security system is how to redistribute means from those who have to those who have not.

⁶ With private or individual insurance the insurant pays an insurance premium that corresponds with expected values of insurance benefits. If the calculated contribution is correct and the group of insured people is large enough, the collected contributions must be sufficient to balance the losses or damages of an insured who suffered from a contingency. Also in this case interpersonal redistribution takes place, but the only objective is to restore the status quo before the risk occurred (Partsch 1983:67, note 61).



Three methods of redistribution were discussed that can be used as instruments for a social security system. The extent to which these instruments can be of use for social security systems depends on the fulfilment of certain conditions in order to let these methods of redistribution function. A preliminary conclusion can be that intertemporal and interregional redistribution as method of social security systems in developing countries is not likely to be found to a large extent. This lead us to the conclusion that, if social security systems in developing countries are present, they will most likely use the method of interpersonal redistribution, because the conditions for this form of redistribution are relatively easy to attain in developing countries.

4.2. Principles and forms of social security systems

As said under Heading 4 the term social security system refers to all measures and strategies by society that, in their entirety, contribute to the objectives of social security. When we want to describe these measures and strategies separately, we are talking about the "forms" of a social security system (Partsch 1983:70). Often these forms of social security follow a certain leitmotif that determines the specific measures and tune the measures to each other. Such a leitmotif is often based on a more general social value. When we analyze these leitmotifs we are talking about the "principles" of a social security system (Partsch 1983:70).

It is clear that principles and forms differ per society, but let us illustrate the relationship between principles and forms with two examples.

The first example comes from the industrialized countries. The dominant principle underlying western forms of social security is without doubt the "insurance principle". In essence this principle means that an individual who is threatened by a contingency pays contributions which will return to the individual when the contingency will occur (risk balancing). Crucial for the insurance principle is that only those people can profit who also contributed in the past. Moreover, when this principle is applied unmodified only those persons can participate that are able to raise the contributions. This insurance principle reflects to a large extent the fundamentals

of the modern prestation and market society. At the same time the forms of the social security system are highly determined, when choosing this insurance principle. Necessary is the formation of a risk group, regulation of the collection of contributions of the insured and the distribution over those who were affected by a contingency. This again requires specialized organizational skills and expert knowledge. Institutions are build then to meet the demand for such organizations.

Different from the first example is the situation in non-industrialized countries, especially those that have been isolated from western influences for a long time. The main principle underlying forms of social security is kinship. The importance and significance of kinship in non-industrialized countries have fascinated anthropologists for decades. Many studies reveal that economic, but also political and social acting in these societies were or are determined by kinship ideology. Important here is that, as far as economic, political and social acting within a given kingroup is concerned, these actings can be reduced to a principle of amity, which is very similar to Sahlin's principle of general reciprocity. This principle is reflected in the forms of social security existing in named societies. Forms of social security, or institutions or processes that can be labelled as such, are often based on this principle of general reciprocity. As at the same time the kinship ideology determines who is kin member and who is not, kinship builds at the same time a solidarity group that is able to provide social security for its members, based on the principle of amity or general reciprocity.

In developing countries a high variety of forms and principles of social security can be found.

With general reciprocity Sahlins (1972:185-275) means transactions by which a weak relation exists between contribution and benefits, for example, gifts to kin. Personal or social relationships between the actors dominate the materiel aspects of the transaction. Although each gift creates an entitlement on a contra-gift, its quantity, quality and time of delivery is not determined in advance, and depends on the possibilities of the receiver and the need of the giver. In extreme cases general reciprocity can lead to a one way move of means, for example, in case of handicapped people.

In literature on social security in developing countries attempts have been made to classify its different forms. The argument is that because of increasing market penetration and the introduction of capitalist relations of production new social security forms arise that are different from those existing before the colonial period. Studies on social security systems in developing countries remarkably show an tendency to classify social security forms in developing countries with help of dichotomies. The dichotomies "modern" versus "traditional" and "formal" versus "informal" can often be found (see, for example, Platteau 1991, several contributions in Von Benda-Beckmann et al. 1988, Bossert 1985). However, as Von Benda-Beckmann et al. (1988) indicate, some problems are connected with the use of these dichotomies modern-traditional and formal-informal. With the modern-traditional dichotomy is mostly indicated the difference between state organized institutions for social security, which are relatively new in developing countries, and forms of social security which function(ed) in the traditional or pre-capitalist society. In developing countries we find many rules and principles which are of ancient origin and which have been maintained through tradition within local communities. But the use of the term "traditional" might imply the notion of an "unchanging tradition" in those societies. Also traditions "discovered" during the colonial period were influenced or even created by economic and administrative measures of colonial governments. It makes sense to describe as "traditional", as von Benda-Beckmann et al. (1988:12) suggest, those forms of social security which are rationalized by reference to tradition, and to distinguish them from historically more recent and innovative legal rules and institutions, as for instance the emerging local institutions of self and mutual help. But it must be kept in mind that these institutions are not necessarily informal, traditional, archaic or customary. They may be modern phenomena, the highly rational responses of people united by a common interest in overcoming problems of need and risk through a cooperative effort. Besides this, large parts of state law can be considered to be traditional, too. This is especially the case with those old rules which have been handed down through the generations within the community of legal scholars, judges and state bureaucrats. Von Benda-Beckmann et al. (1988:13) suggest that we might do better to speak, with respect to any society, of old rules and recent innovations, of historical and contemporary legal forms, if we want to give a temporal aspect to our conceptual usage. They conclude, that "if we use the conventional pairs of terms to identify in a general way state law on the one hand, and traditional law on the other, we are certainly embarking on a mistaken voyage filled with false comparisons and false contradictions" (Von Benda-Beckmann et al. 1988:13).

The second dichotomy to be found in literature is formal versus informal social security forms. As in other spheres of life (such as labour relations and credit arrangements) "formal" tends to be equated with western-style, state-initiated social security, and "informal" with social security provided by family, kinship and village groups. By this equation, however, we are almost certain to miss the informal elements in the western, and the formal elements in the indigenous systems. The actual working of western social security often resembles very little a model of formal applications of universal rules. Local, indigenous forms of social security, on the other hand, can be very formal. In the local village and tribal spheres we are dealing with sets of quite well defined legal obligations and rights, on any reasonable view of what is "legal". Obviously, we also find informal mutual help arrangements which transcend legal obligations. These, however, should be opposed to the arrangements of both state and local laws. So we can distinguish formal and informal aspects of social security forms in different societies, but cannot classify sets of social security arrangements (state and indigenous respectively) along the same line (Von Benda-Beckmann et al. 1988:12).

Previous remarks suggest that a classification according to dualistic lines should be avoided. Can we think of an alternative classification? Yes, if we can argue why we want such a classification in the first place. One argument is that a classification can make an investigation into the functioning of social security forms easier. As argued developing countries show a variety of social security principles and forms, not in the last place caused by the influence of colonial and post-colonial developments. A "social security pluralism" (Zacher 1988:26) has developed. By classifying these forms according to certain criteria we can group forms and analyze

their characteristics, their mutual differences and their dynamics. Moreover, a classification can help us to set bounds to our field of study, when we want to analyze a subsection of a given social security system.

The classification proposed in this study is derived from a common classification criterium in our discipline (economics), namely the level of analysis. When we would investigate social security forms it will become clear that they can be found at all levels of society: community level, in churches, at state level, within the family or within kingroups, etc. It is mainly for analytical purposes that we want to make a classification according to the level at which social security forms play. When is determined at which level what social security forms can be placed we can investigate if these forms at each level follow common principles, use the same method of redistribution, are determined by the same factors, etc. The hypothesis is that similarities between social security forms will rather be found between forms that function at the same level than between forms that are classified according to their legal (formal or informal) or historical (modern or traditional) status.

The first level of analysis we can distinguish is the individual. An individual can protect him- or herself against contingencies by individual precautions, for example by dissaving, selling durable items, private insurance companies, etc. Individual precautions are not social precautions and therefore do not fall under the social security scheme. At the individual level no social security forms in the proper sense of the word can be found.

When the individual is not able to take precautions him- or herself, the first level of support, and our second level of analysis, is the family. Here we restrict ourselves in first instance to the nuclear family (husband, wife and children). We will call this the household. The household can be considered as the basic unit of survival. Contingencies will be countered first within the household. But when discussing the conditions for solidarity groups, we already questioned to what extent the nuclear family, given her size, will be able to provide social security to its members and can be considered as a valid solidarity group for social security purposes. In this study the redistributive principles within the household in times of contingencies are not considered as social security forms. These mechanisms are

considered to be part of the household survival strategy.8

The third level of analysis is what we will call the level of small-scale social relationships. At this level we can place those social security forms that can be found within extended families, clans, communities and villages, among friends, neighbours, and church members, etc..

The fourth level is the so called corporate level, under which we can place those social security forms that are neither organized by the state nor depend on small scale social relationships. National Provident Funds, company funds but also charity organizations might fall under this level.

The fifth level at which social security forms can be found is the level of the state. State initialized and organized social security forms can be social assistance schemes, pension schemes and sometimes medical schemes. In literature these forms of social security are often headed under "formal social security".

The sixth level is the supra-state level or international level. It can be questioned if international social security forms can be found, but emergency help in case of famines, floods or droughts might be labelled as such. Interesting topic of discussion can be if regular development aid also falls under international social security.

4.3. Determinants of social security systems

What we do not know from previous sections yet is which factors determine the specific structure of a social security system at a particular place and at a particular time. We recall that the issue at stake in social security is that a contingency causes a deterioration in the standard of living of individual(s), and that the recuperation would need extra means. Solutions were found in the different methods of redistribution that can be used as instruments for reaching the objectives of social security. From this point of view those factors are important that, firstly, determine the size and

⁸ Although it is stated in this paper that we only consider those forms of collective action as social security forms that exceed the household level and that contribute to the objectives of social security, we do not deny the importance of intra-household relationships when discussing social security of individuals (see, for example, Agarwal 1991).

composition of disposable means and, secondly, determine the conditions for the several methods of redistribution. Partsch (1983:72) distinguishes three determinants of social security systems: the level of economic development, the social structure, and values and norms of a group or society.

The level of economic development determines in first place the amount of goods, services or money available for social security purposes. If there are just enough means to give everyone a minimum standard of living problems could arise for those individuals suffering from a contingency. The problem in many developing countries is that millions of people live below a minimum standard of living. In that case not many means are available for social security purposes, and when social security forms exist they often take the form of "shared poverty": although no one has enough means people will help each other, as they know that in future they also will need help one time. In the second place economic development causes a increase in the standard of living. In turn this higher standard of living might lead to a new definition of what should be the minimum standard of living. More means have to be made available then, to bring someone back on the initial standard of living before the contingency occurred. In the third place the level of economic development also determines to a large extent which modes of redistribution can be used as instruments for social security systems. We saw that especially intertemporal and interregional redistribution require the presence of certain economic conditions. The introduction of money, for example, facilitated intertemporal redistribution. Moreover, individuals became less dependent on goods and services from kin, friends, or other interpersonal transfers as money enabled them to contribute to a common fund from which they could receive benefits in times of need. The introduction of money widened the choice for a particular mode of redistribution and social security form.

Social structure is a ambiguous term and what exactly is understood by this term is not clear. Social structure as a general concept comprises a multitude of empirically verifiable and relative stable features that characterize a society. Among others, social structure can indicate the degree of division of labour, institutions and bureaucracy, social strata and class formation, categories of population according to age, education or income, etc. With regard to social security systems social structure primarily deals with the standard of living of its members. Secondly, the social structure tells us something about the general social relationships in society which, in turn, shape the size and quality of social relationships that are important for the (re)distribution processes to take place. In the third place several elements from the social structure are important for the shape of social security systems, like the age distribution, family structure, production and employment structure, settlement patterns, etc.

Last but not least values and norms that regulate the social acting of members of society, are very important. Values symbolize the common view of a stratum or a group in society or the common view of a society as a whole on what is desirable; values influence and limit the choices between possible acts, means and objectives. Values determine the social security system to the extent that they influence the principle of social security systems that is chosen. As we already argued it is not very likely that the social security system of a group or society follows a principle that contradicts general and widely acknowledged values. Moreover, values are often used to defend a choice for a particular social security principle. In western societies the choice of the insurance principle is justified by referring to its correspondence with generally accepted values like self-responsibility and "Leistungsgerechtigkeit" (Partsch 1983:74).9 Values, however, should be upheld irrespective of the situation we are

talking about. Values have an universal meaning. When we want values to be of use for regulating social acting they have to be operationalized. In sociology the term "social norms" is used for these operationalizations (Partsch 1983:74). Norms are mandatory and relatively constant rules of conduct; norms indicate exactly in a particular situation how to handle

⁹ With "Leistungsgerechtigkeit" is meant the general idea prevailing in western societies that a person can only benefit if he or she also contributed in the past. Distribution takes place "according to work or contribution" and not "according to need".

and what acts are prescribed or prohibited. If norms are respected in daily life they do not only direct social acting but also bring about a certain regularity, uniformity and repetition in the outcomes of particular social acts. This latter characteristic of norms is important for social security systems as the functioning of the system depends on regulation and regularity. As said earlier, it cannot be expected that the necessary processes of (re)distribution will take place and will take place adequately, when no norms are present to force members of a solidarity group to contribute.

By identifying the three main determinants of social security systems, it is possible theoretically to solve the problem of explaining why social security systems differ from each other and why they change. These differences and changes can be explained because determinants differ and because changes take place in these determinants. The analysis of the determinants and their changes would explain to a large extent the dynamics of social security systems. The question which factors cause the changes of the determinants might lead to the ultimate identification of changes in social security systems, but this would require a comprehensive study of the dynamics of societies. Although attempts have been made, no such theory exists and the analysis of the determinants is all that is possible. It should be said here that the determinants are not separate entities in a given society and are highly interdependent. A change in one of the determinants will cause changes in the other two. Because of this interdependency Partsch (1983:76) suggests to combine the changes of these determinants in one term when they are used to explain the development of social security systems. The term Partsch uses is "social differentiation", a long-lasting process of development whereby small, homogeneous social formations develop to larger, heterogeneous and complex societies because of increasing division of labour, social stratification and other structural changes. In a process of social differentiation not only the determinants are changing but also the individual standards of living will gradually differentiate. This process has consequences for the social security system as this will lead to plural forms of social security.

For theoretical purposes it might be useful, then, to classify societies

according to the degree of social differentiation. Analogue to this classification also the social security systems will differ. Partsch (1983:78) distinguishes less differentiated or primitive societies (archaic societies), more differentiated or complex societies (feudal societies) and highly differentiated or modern industrial societies. Of course all kind of intermediate forms are possible.

In this place it is important to know where to place the developing countries. Partsch (1983:78) concludes on the one hand that the so-called developing countries cannot be considered as modern industrial societies and on the other hand did not arose because of a autonomous process of social differentiation but from contacts with other civilizations.

Evidently, developing countries also have their own dynamics. One difference with industrialized countries, however, is that the own internal dynamic of pre-capitalist societies was highly disturbed and sometimes destroyed by the intrusion of capitalist elements and forces. The pre-capitalist social formations changed structurally as a result of western expansion in these societies.

Six fundamental processes of change have been taking place in the precapitalist societies: the introduction of a money economy, the introduction of private ownership of land and of commercial monocultures, migrations of workers and the flight from the land, urbanization, industrialization, and national integration.

The introduction of money. or the intensification of its use, was an important change. The development of a money economy was bound up with the conversion of traditional taxes from kind into money, with the growth of trade and the replacement of barter by money exchange, and lastly with the organization and expansion of wage-earning labour in accordance with the requirements of the government and the colonial economy.

The development of capitalism also gave rise to the individual appropriation of land. The indigenous population was often expropriated and the land was divided amongst a privileged group of people. In Latin America this process started earlier than in Africa or Asia.

The development of new economic activities (like mining and other

industries) and new organization forms of agriculture (like plantations) increased the need for wage-labourers, entailing significant migratory flows of workers. These migrations can be of a temporary or of a more permanent character. The latter induces a one-way traffic from the countryside to the towns.

Urbanization has become a very important phenomenon in recent years. Towns and cities have been created to fulfil functions of an administrative, military, commercial or other nature.

Industrialization has taken a specific form bound up with Western development. It is usually confined to industries exploiting natural resources and providing raw materials for export, or light manufacturing industries exporting mainly to western countries.

Finally, there is the emergence of nationhood, which has its roots in European expansion. But this national integration process if far from complete: there are still marked ethnic and regional differences in Latin America, Asia and Africa.

The above six structural processes have transformed pre-capitalist societies with regard to their activities (industries and plantations, new agricultural technologies), their way of life (urbanization, population movements, money economy), their social structure (development of private ownership, appearance of new production relations) and, lastly, their socio-political organization (process of colonization followed by national integration), social psychology and culture (Malassis 1975:60-1). The result of these structural changes is what we tend to call developing countries. Pre-capitalist societies have been fundamentally transformed and depending on the country or region concerned these pre-capitalist societies may largely have been destroyed or a dualistic structure has emerged where pre-capitalist and capitalist elements exist alongside each other.

It will be clear to the reader that these structural changes in the economic and social structure, and in the norms and values largely influence social security forms in developing countries. The questions how and to what extent social security forms are influenced by these structural changes are beyond the scope of this paper, but it must be clear that insight in these structural processes is necessary in order to understand the development

of and changes in social security forms in developing countries.

5. SUMMARY

In this paper we discussed some basic issues with regard to social security and social security systems. In the first section we defined social security in such a way that also social security in developing countries can be analyzed. In the second section we justified our choice for a wider definition by explaining the universal necessity of social security. The actual efforts by a given society to reach the objectives of social security have been defined in the third section as a social security system. We discussed three modes of redistribution that can be used as method underlying social security systems. We discussed also the conditions under which these modes of redistribution can operate. Then we defined briefly the terms "principles" and "forms" of social security systems, discussed two classification methods for social security forms, and introduced a third classification. In the last subsection the main determinants of social security systems were analyzed and six major socio-economic developments were indicated that take place in developing countries.

It is thought that the concepts and ideas presented in this paper may contribute to the construction of an analytical framework of social security which is less biased to western social security systems and, consequently, enables the study of social security in developing countries to be done in a wider perspective than many studies have done until sofar.

REFERENCES

- Adams, D.W., D.H. Graham and J.D. von Pischke (1984), Undermining Rural Development with Cheap Credit, Westview Special Studies in Social, Political and Economic Development, London: Westview Press
- Agarwal, B. (1991), "Social Security and the Family: Coping with Seasonality and Calamity in Rural India", in: E. Ahmad et al. (eds.), Social Security in Developing Countries, Oxford: Clarendon Press
- Ahmad, E., et al. (1991), Social Security in Developing Countries, Oxford: Clarendon Press
- Atkinson, A.B. (1989), Poverty and Social Security, London: Harvester Wheatsheaf
- Benda-Beckmann, F. von, et al. (eds.) (1988), Between Kinship and the State; Social Security and Law in Developing Countries, Dordrecht: Foris Publications
- Binswanger, H.P. and M.R. Rosenzweig (1984), "Contractual Arrangements, Employment, and Wages in Rural Labour Markets: a Critical Review", in: H.P. Binswanger and M.R. Rosenzweig (eds.), Contractual Arrangements, Employment, and Wages in Rural Labour Markets in Asia, New Haven and London: Yale University Press
 - Bossert, A. (1985), Traditionelle und moderne Formen sozialer Sicherung in Tanzania; eine Untersuchung ihrer Entwicklungsbedingungen, Sozialwissenschaftliche Schriften, Heft 12, Berlin: Duncker & Humblot
 - Burgess, R. and N. Stern (1991), "Social Security in Developing Countries: What, Why, Who and How?", in: E. Ahmad, et al. (eds.), Social Security in Developing Countries, Oxford: Clarendon Press

- Drèze, J. and A. Sen (1991), "Public Action for Social Security", in: E. Ahmad, et al. (eds.), *Social Security in Developing Countries*, Oxford: Clarendon Press
- Freiburg-Strauss, J. and D. Jung (1988), "Social Security in the Peasant Society of Boyaca", in: F. von Benda-Beckmann, et al.(eds.), Between Kinship and the State; Social Security and Law in Developing Countries, Foris Publications: Dordrecht
- Fuchs, M. (1988), "Social Security in Third World Countries", in: F. von Benda-Beckmann, et al. (eds.), Between Kinship and the State; Social Security and Law in Developing Countries, Dordrecht: Foris Publications
- Fuchs, M. (1985), Soziale Sicherheit in der Dritten Welt; zugleich eine Fallstudie Kenia, Baden-Baden: Nomos Verlaggeschellschaft
- ILO (1984), Introduction to Social Security, Geneva: ILO
- Malassis, L. (1975), Agriculture and the Development Process, Paris: UNESCO Press
- Mesa-Lago, C. (1978), Social Security in Latin America; Pressure Groups, Stratification and Inequality, Pittsburgh: Pittsburgh University Press
- Mouton, P. (1975), Social security in Africa; Trends, Problems and Prospects, Geneva: ILO
- Newbery, D.M.G. (1989), "Agricultural Institutions for Insurance and Stabilization", in: Bardhan, P. (ed.), *The Economic Theory of Agrarian Institutions*, Oxford: Clarendon Press
- Newbery, D.M.G. and J.E. Stiglitz (1981), The Theory of Commodity Price Stabilization; A Study in the Economics of Risk, Oxford: Clarendon Press

- Partsch, M. (1983), Prinzipien und Formen sozialer Sicherung in nicht-industriellen Gesellschaften, Sozialpolitische Schriften, Heft 48, Berlin: Duncker & Humblot
 - Pischke, J.D. von, D.W. Adams and G. Donald (eds.) (1983), Rural Financial Markets in Developing Countries: their Use and Abuse, World Bank EDI Series in Economic Development, Baltimore: John Hopkins University Press
- Platteau, J.P. (1991), "Traditional Systems of Social Security and Hunger Insurance: Past Achievements and Modern Challenges", in: E. Ahmad, et al. (eds.), Social Security in Developing Countries, Oxford: Clarendon Press
 - Polanyi, K. (1968), "The Economy as Instituted Process", in: E.E. Leclair Jr. and H.K. Schneider, *Economic Anthropology; Readings in Theory and Practice*, New York: Holt, Rinehart and Winston
 - Sahlins, M. (1972), Stone Age Economics, Chicago: Aldine
 - Woodman, G.R. (1988), "The Decline of Folk-Law Social Security in Common-Law Africa", in: F. von Benda-Beckmann, et al. (eds.) (1988), Between Kinship and the State; Social Security and Law in Developing Countries, Dordrecht: Foris Publications
 - Zacher, H.F. (1988), "Traditional Solidarity and Modern Social Security: Harmony or Conflict?", in: F. von Benda-Beckmann, et al. (eds.), Between Kinship and the State; Social Security and Law in Developing Countries, Dordrecht: Foris Publications
 - Zacher, H.F. (ed.) (1979), Bedingungen für die Entstehung und Entwicklung von Sozialversicherung, Berlin: Duncker & Humblot

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