Reinforcing households’ capabilities as a way to reduce vulnerability and prevent poverty in equitable terms

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Introduction

Reducing poverty through appropriate strategies is one of the worldwide current major objectives. Helping those who are already poor to escape from poverty usually does this. Preventing the non-poor from falling into poverty – or the poor from getting poorer – when they are confronted with extreme difficulties could also be a supplementary solution. This second perspective is not frequently raised despite the increase of uncertainty and insecurity in a strongly changing world. All countries, in the developing and industrialised worlds, are facing regular internal and external shocks, which have an impact on their populations’ standards of living.

Therefore individuals, households and social groups may see their level of living decrease and the risk of poverty traps appear, with long-term consequences on future generations. This raises the issue of vulnerability and makes the search for security a new objective for the present as well as for the future.

Let us define ‘vulnerability’ as the probability of having one’s situation worsen when facing a dramatic event. Depending on various factors, this worsening may lead to poverty. Therefore decreasing the level of vulnerability could also be considered as part of poverty-reduction policies. It implies to design preventive *ex-ante* actions, besides the usual *ex-post* curative policies. In political terms, such an attitude may also be quite attractive and rewarding, since it corresponds to a reinforcement of the people’s global security, which is now emerging as a new social claim.

Such a focus on vulnerability, complementary to that of poverty, implies identifying the threats and, more generally, the risks that people
encounter in their daily lives. Assessing their capacity to overcome the social consequences related to the realisation of such risks, i.e. their capacity of resilience, can help define the appropriate means and supportive policies that would improve the global security.

In this context, the ‘capability approach’ as developed by A. K. Sen appears a natural reference, for it is based on the improvement of the people’s long-term capabilities. However, it focuses predominantly on the decrease of poverty through the design of ‘human development strategies’ (UNDP 1999), improving the access to health and education, to safe water and adequate nutrition, thus leading to an increase in the level of human capital. It also helps to fight against social exclusion by increasing empowerment and participation in public decisions, reinforcing, in this way, the level of social capital.

In the meantime, the improvement of people’s capabilities leads them to become less vulnerable to the various risks encountered, because the amount of human capital – and social capital to a certain extent – that they own can be used besides physical and financial capital to face the difficulties that occur. Therefore, focusing on capability allows tackling, at the same time, both issues of vulnerability and poverty. Within this framework, designing equitable policies means not only reducing poverty through the improvement of people’s capability but also ensuring security through the decrease of vulnerability.

Through the next pages, we will present, first, the relevance of the capability approach when dealing with vulnerability. Then, by examining the link between vulnerability, risk and capability, we will introduce the idea of vulnerability-reduction policies as preventive options. Finally, to raise the issue of an equitable distribution of security among the people, we will look at some of the social justice criteria that could be used in this context.

The relevance of the capability approach

What does the concept of ‘capability’ mean? The French language does not include such a concept, which lies between the two notions of capacité (ability) and potentialité (potentiality). In the available translations from English into French of Sen’s work, a series of words also appears frequently, such as possibilité (possibility), faculté (faculty) opportunité (opportunity). But their combination introduces ambiguity into the definition and adds to confusion.
Reinforcing households’ capabilities

Going back to the Webster’s New Collegiate Dictionary, the definitions found for ‘capability’ are: (i) the quality or state of being capable (which means ability), (ii) a feature or faculty capable of development (which expresses potentiality), and (iii) the facility or potential for an indicated use. This third definition, to which we refer in this chapter, includes, in fact, the two dimensions of ‘ability’ and ‘potentiality’ as components of the ‘capability’.

The basic definition

The capability of a person is usually defined in relation to her ability to function. It reflects what she can actually do or be within a certain context. Living is, for everybody, a combination of various functionings (‘being’ and ‘doing’) such as moving, being clothed and sheltered, being able to meet one’s nutritional requirements (or being well nourished), being in good health, being socially respected and having the power to participate in the social life of the community (Sen 1987).

The capability of a person results in the achievement of a combination of various functionings. Her well-being is concerned with this achievement (Sen 1993). To achieve these functionings, she has to use a variety of commodities that she will choose according to their specific characteristics (Lancaster 1971). She also needs primary goods to access services and, through these services, she may be able to accumulate and generate assets.

All this increases the person’s ability to do things and improve her potentiality dimension. It enables her to live a pleasant life and to become what she wishes to be. These are the objectives proclaimed by the human development strategies which are being implemented in various developing countries. This approach, which is based on the assessment of capability, has brought new insights in the analysis of the population standards of living and the evaluation of poverty situations.

However, in operational terms – i.e. to measure people’s capability and to design the corresponding targeted actions – there is a need to distinguish between the various components which interact within the capability definition. For instance, any increase in capability is related to the access to goods and services: i.e. access to public transport, access to education, access to health services, etc. But even if these services are available, people may not have the physical capacity (due to personal handicap or remoteness), or the financial capacity (insufficient level of
income, big opportunity cost), or the social opportunity (due to rights and constraints) to be able to fully benefit from them. Moreover, the access to these goods may be insufficient to allow the generation of assets through accumulation: human capital through education and health, financial capital through savings, social capital through stable relationships, etc.

Therefore examining the concept of capability itself is a necessary step to understand what are its main components and how they could determine the policy measures that should be designed.

**A few of capability’s components**

We have summarised the main steps of the capability approach in Figure 13.1 which relates commodities (with their characteristics) to the capabilities, the functionings and the level of well-being reached. To introduce vulnerability in this framework, we need to add a few modifications which increase precision while remaining consistent within the overall approach.

First, commodities should be considered in a wider sense to include all type of goods and services. Then the overall endowment of the person will includes various type of goods, services and assets, all of them reflecting directly on her capability (see Figure 13.2).

Second, a distinction can be made within the capability concept between the ‘ability’ and the ‘potentiality’ dimension and within the functionings between the fact of ‘doing’ and of ‘being’. Capability can be considered as a combination of the ‘ability of doing’ things with the
‘potentiality of being’ as one wishes. Ability is certainly necessary to escape from poverty by doing the right things at the right time. But potentiality, through the constitution of endowments and mainly assets, prevents the person from falling into poverty. Her various endowments, such as land, durable equipment, savings, human and social capital, etc., can be used as a buffer – by selling part of these assets or by increasing their yield – when facing dramatic events which cause losses in the level or the standard of living. Therefore, she will be less likely to experience a worsening in her situation (Seigel and Alwang 1999).

Third, since the level of potentiality is the result of the ability of doing things regularly during a certain period of time, such an endowment-based view may not be sufficient to ensure that the right reaction occurs to resist downward movements in well-being. On one hand, the person may not have the ‘individual capacity’ required to use these endowments or assets correctly, because of handicap, illness, despair, lack of information, etc. On the other hand, ‘social opportunities’ may not exist due to social constraints, i.e. services such as education or health may be available but certain categories of people may not have the right to access them, based on tradition, discrimination or for political reasons. This kind of drawback is relevant both to the ability and the potentiality components of the capability.
According to such an adjusted framework, capability then becomes the result of a combination of ‘ability of doing’ and ‘potentiality of being’. It is based on the constitution of endowments (commodities and assets) as a result of an individual capacity in a context of social opportunities. All these elements – namely endowments, individual capacity and social opportunities – have to be taken into account when assessing people’s capability and designing capability-based development policies (see appendix).

However, aggregating these elements through poverty analysis remains an issue since they are located at different levels: capacity at the individual level, endowments at both individual and household levels, and social opportunities at the group level. Discussion on relevant methodology refers then to household economics and social group analysis and is not the objective of this chapter.

### Improving capability to reduce vulnerability

Dealing with the issue of vulnerability implies considering capability as a combination of the two components: ability and potentiality. In general terms, vulnerability is the probability of falling to a lower state of well-being. It may be a fall into poverty, which is our main concern, but not necessarily, since many people may be vulnerable but not poor. However, poor people are generally more vulnerable and therefore the willingness to reduce poverty can be related to the one of decreasing vulnerability.

Our objective is to look for ways of making people less vulnerable in order to decrease or annihilate their probability of falling, when confronted with dramatic events. This requires introducing the notion of risk of such events or shocks.

### Risk and vulnerability

Vulnerable people are, by definition, people at risk. This means that if a risk occurs and is transformed into a dramatic event, the people may see their situation worsen in terms of level of living (i.e. income and consumption) or standards of living (access to education, health, more generally quality of life).

Analysing vulnerability necessitates taking into account the risk encountered. There is a variety of risk. Some can be considered as
social risk, since they are related to changes in the environment – either the macroeconomic environment (i.e. the price increases related to a devaluation), or the social and political environment (job losses, riots, etc.), or the natural environment (i.e. linked to climate changes, natural disasters, floods, etc.). These are external risks for the person or the household. Others are idiosyncratic risks related to the characteristics of a person or a household (i.e. an accident, the death of the household’s head, a divorce, etc.). All these risks have one thing in common which is that, when they occur, the related shock on the well-being causes a downward trend in the household’s standard of living, even if this does not automatically lead to poverty.

Let’s take, for instance, the case of a household facing a sudden cut in the real income (due to job losses through company restructuring or to inflation linked to currency devaluation). This situation affected many families in Africa during the structural adjustment period of the 1980s. It drove some of them to ‘monetary poverty’. To improve the situation, expenditures (or opportunity costs) were reduced and some children were taken out of school or put into lower-quality schools. But this induced a kind of ‘standard of living poverty’, through the non-enrolment of children. It resulted in the reduction of human capital because of the impossibility to accumulate through education: a kind of ‘potentiality poverty’ is therefore generated.

Consequently, access to the labour market for these children will be more difficult and the level of expected income lower. This transforms their ‘potentiality poverty’ into a ‘monetary poverty’. In this way, poverty has been transmitted from one generation to the other and this poverty interactions mechanism generates a vicious intergenerational cycle, a cycle in which potentiality plays a key role. This means that protecting the household from the risk of falling into poverty would have avoided such a vicious cycle.

**Vulnerability and capability**

What do people or households do when they are confronted with that shock in order to alleviate the economic and social consequences? They use the means they have in hand to overcome the situation.

For instance, confronted with a loss of income, they may use savings to compensate, sell some land or cattle, take the children out of school, or ask for help from a social group they are related to. In each case, they refer to their own assets, whether these are financial, physical, human
or social. It is this capacity to use these assets correctly that enables them to overcome the situation; in other words, it is the potentiality dimension of their capability which is used.

We are, therefore, back to the capability approach which considers the use of commodities for functioning. But in this case, the potentiality component through the assets owned plays a more important role than the ability one. The right combination of various assets, and the capacity of using them correctly, will avoid falling into poverty when faced with a shock.

In general terms, the person’s vulnerability increases when facing greater risk but decreases when the level of her capability (through its potentiality dimension) gets higher. This relationship between vulnerability, risk and capability can be expressed by a simple formula:

\[
\text{Vulnerability} = \frac{\text{Risk}}{\text{Capability}}
\]

Since everyone in their daily life faces a pattern of various risks (social and idiosyncratic), it is the set of assets owned which prevents them from falling into poverty. According to their capacity of combining various assets, they will be more or less protected from the consequences of any corresponding shocks.

In this context, ‘resilience’ is the *ex-post* measure of a person’s capability to resist a downward movement of well-being by mobilising her potentiality.

**Reducing vulnerability is a preventive attitude**

This result shows that any increase in the person’s capability, through the development of her potentiality, reduces vulnerability and would, therefore, protect them from falling into poverty. This leads to a complementary way of fighting poverty by preventing its emergence *ex-ante* instead of fighting it only *ex-post* (i.e. once it has occurred) through the usual package of poverty reduction policies.

Of course this does not concern the long-term structural poverty which requires the design of appropriate measures to help people escape from poverty. However, all the current studies on poverty dynamics show that, especially for monetary poverty, a percentage of people are regularly emerging from poverty but some of them may fall into poverty again depending on the various events they encounter (World Bank 2000). We are mainly concerned with this latter category of people.
In this context, two policy orientations can be considered: one focuses on poverty reduction as an *ex-post* policy. This applies a set of measures already used to fight structural poverty. The second focuses on vulnerability reduction as an *ex-ante* policy to prevent the fall into poverty. Figure 13.2 presents these alternatives. In both cases, the capability approach is referred to by introducing the distinction between commodities and assets, ability and potentiality, doings and beings, deprivation and security.

More generally, as vulnerability depends on both the risk and capability levels, an appropriate strategy would be to combine measures that reduce the risks encountered and increase the people’s capability (through its potentiality component).

For example, the case of women is a particular and quite interesting one. First, all surveys show that women live in a great state of vulnerability. Their opportunity of accessing work, a regular income, or any kind of asset is never certain, so the risk of downward well-being is permanent. One could even say that they are more vulnerable than poor, compared with men, and this appears through household survey data in a lot of urban as well as rural areas (Lachaud 1999). However, vulnerability has a strong impact on the way they allocate expenditures, savings and time (Ardeni and Andriacchio 2001).

Second, this vulnerability originates in a ‘gender inequality chain’ with which women are confronted through their whole life cycle and which has consequences on a daily basis (Dubois 2000). This chain begins with the probability of birth which may be influenced by specific policy measures (e.g. the one-child policy in China), then the probability of living after one year (e.g. high female infant mortality rate in India due to the dowry tradition) or even after five years (high child mortality rate in some African countries). All this result in a lack of women (Sen 1992).

The chain perpetuates through the asymmetric distribution of education: either enrolment rates or the length of studies or the quality of education are lower for women. It later switches to the difficulty of integrating the labour market as some activities do not allow women to receive an adequate salary, i.e. they are paid less and have a higher probability of being made redundant first in case of institutional restructuring. So they have greater difficulty in constituting assets. This chain finally closes with inequalities in the decision-making process either in companies, the public sector (the ‘glass ceiling’ barrier) or
political stances (for this reason a legal obligation of parity was introduced in France).

The gender inequalities chain makes women vulnerable to a lot of external shocks by limiting their capacity of innovation and preventing them from taking the opportunities which would have helped them to avoid poverty. This situation is even more true when the household’s head is a woman, for there is no man to compensate for the inequalities or to do the things that women are socially not allowed to do. Such constraints are the result of various discrimination rules established according to legalised traditions on what a woman can or cannot do, which generally does not match their expectations.

Women are, therefore, more exposed than men to the risk of falling into monetary poverty since they obtain lower incomes on a more irregular basis and have greater chances of losing their jobs. When this happens, they have more difficulty, having fallen into poverty, in escaping from it, due to their lower level of education (human capital), the lack of valuable means (assets) and the constraints linked to domestic activities and children. All this increases the probability of falling into a poverty trap, with heavy consequences on the children.

Thus, gender inequality increases vulnerability on a permanent basis and generates long-term poverty which, through the children, can be transmitted to the next generation. We are confronted with the same vicious poverty cycle as previously, which links vulnerability to inter-generational poverty, but in the case of women, gender inequality is the source of the mechanism. Breaking this cycle requires either fighting gender inequality, at the various stages of the chain, or reinforcing the women’s capabilities (and more precisely the potentiality component). This is often done, for instance, by a series of actions facilitating the access to literacy and professional education, the use of credit and micro-finance, the constitution of livestock, a reduction in the time devoted to domestic activities such as the search for wood and water, etc. (Droy et al. 2001).

**Introducing security as a way to relate to social justice**

Reducing people’s vulnerability leads to an improvement in their security. For instance, if the probability of famine decreases to zero because of the implementation of food stocks, the people will feel less insecure in terms of access to food, i.e. food security has been achieved. A similar
policy could be promoted in a lot of areas: access to income, work, health, education, peace, etc. Considering these various dimensions of security, the UNDP has already spoken of ‘human security’ (UNDP 1994).

Therefore, generally speaking, security is ensured through the reduction of vulnerability and the improvement of potentiality (as a part of the capability approach). A key question remains in terms of social justice: by acting on the level of vulnerability, can we ensure the same level of security for everybody? With such a question we are brought back to the issue of equality.

Back to the issue of equality

The famous debate on ‘equality of what?’ brought the equality of capability as the best objective for action since the gap of inequality between capability is narrower than the one of utility (measured through income), or of consumption of primary goods, etc. (Sen 1982, Sen 1997). In a way, it can be compared to the equality of opportunity which has become the policy reference for a lot of government and development agencies.

Considering security, it should be noted that security increases when vulnerability is reduced, since they are interrelated. In this case, facing either the distribution of vulnerability or the distribution of security gives a similar answer to the question of equality. Vulnerability increases with risk and decreases with the person’s potentiality. Therefore, one can consider that acting on risk (to reduce it) and on capability (to improve it) should be the two main components of a public policy which aims at ensuring security in equitable terms to everyone.

If the poor and the rich were confronted with the same risk, either social or idiosyncratic, the solution would be quite simple: focusing on the equality of capability would be the appropriate solution, i.e. in our case it would be the improvement of potentiality. Unfortunately, the risk is partly related to the level of poverty. Poor people live in places where there is a higher risk of being confronted with natural hazards and environmental damage, illness due to poor hygiene and lack of sanitation, accident either in the work place or outside, or aggression, etc. Therefore one has to take into account the inequality of risk and its distribution among the people, differentiating between social and individual risk.
Criteria for action

Faced with such a complex situation, what are the criteria for action, in terms of social justice, that would ensure an equality of security for all? We suggest reference to the usual alternative ‘weak’ and ‘strong’ criteria, both of them requiring, however, more in-depth thought to build relevant solutions.

A ‘weak criteria’ would focus on decreasing the social risk while improving people’s capability through a universal principle of action. The French social protection system is an example of this. In this case, appropriate policies would reduce the potentiality poverty and decrease the part of the risk directly linked to poverty. Both of them contribute to a decrease in vulnerability and an improvement in security. For instance, people may wish to move from a dangerous place to a better one as their level of education increases. Unfortunately, due to the current social rigidities, some of the poor may be unable to do this. This makes the criteria insufficiently sustainable and requires a stronger criterion.

The second criterion, the ‘strong criterion’, is based on Rawls’ difference principle (Rawls 1971) and takes into account the whole range of risk inequalities that the poor face. For each kind of risk that is encountered (and the corresponding level of shock that results), the poor would be encouraged to constitute a certain level of assets in order to face the same level of risk as the equivalent rich. Such a targeted solution is more difficult to implement and requires a lot of information about the levels of risk, vulnerability and the composition of capability.

This means that an important amount of research work remains to be done in conceptual and empirical terms. A set of indicators needed to be produced in order to measure the distribution of the various dimensions of vulnerability, risk and capability through appropriate household investigations and monitoring systems (regular surveys, sentinel site, observatory, etc.).

Conclusion

This chapter shows that the capability approach can be successfully used in the definition of vulnerability. Through this framework, any reduction in vulnerability, and the corresponding improvement in human security, appear as supplementary ways of fighting poverty
ex-ante, i.e. through a preventive attitude by considering those who may suffer from dramatic events.

The problem is, therefore, to improve the resilience capacity, i.e. the capacity to cope with the economic and social consequences of shocks. The capability approach leads to feasible solutions for it allows the design of human development strategies policies aimed at reinforcing people’s capability. However, one should distinguish between the ability component of capability, which is used to act against deprivation, and the potentiality one, which increases the protection towards risk. Vulnerability is directly linked to the level of potentiality achieved when facing risk and through this distinction Sen’s capability approach remains appropriate.

Human security, meanwhile, is directly linked to vulnerability. Making people less vulnerable is a necessary step for improving their security (i.e. decreasing their insecurity in its diverse dimensions). This could be done by decreasing the various risks they are facing. However, it is a complex issue because risks are multiform and divided between idiosyncratic and social risks. A second option would be to improve people’s capability as already suggested through the design of human development strategies.

In that case, the focus should be put on the constitution of endowments through the accumulation of various assets. This can be understood, in fact, as a reduction of the ‘potentiality poverty’ which expresses the lack of endowments and which complements the usual ‘monetary poverty’ and ‘standards of living poverty’. It requires, however, the person’s ability to function for a long enough period of time so as to constitute such endowments before any shock occurs. The lack of potentiality could be considered as the deepest dimension of poverty. Therefore, public policies aiming at poverty reduction would have to integrate these three dimensions of poverty: monetary (or income), standards of living and potentiality poverty. Moreover, bringing potentiality into the analysis of poverty, through the use of various forms of endowments, contributes to the definition of sustainable human development (Dubois et al. 2001), a development that ensures the transmission of potentiality in equitable terms from one generation to the other.

The issue of social justice comes into the debate when confronted with vulnerability and security. It goes back to the famous discussion about ‘equality of what?’ – the equality of capability suggested by Sen does not automatically imply an equality of security because the
vulnerability towards risk may differ from one person to another. Risk has an idiosyncratic component which is also linked to the level of poverty: it decreases when poverty is reduced.

In conclusion, vulnerability relates consistently to the notion of capability and those of security and social justice by referring to the 'potentiality poverty'. It adds new conceptual elements to the design of human development strategies which were originally based on the capability approach for poverty reduction. In this way, it expresses a new responsibility towards human beings for it is better to prevent vulnerable people from falling into poverty, knowing the social consequences on the capabilities of future generations (Sen 2000).

Appendix: elements for a conceptual formalisation

Let us refer to the person i living at date t. She is supposed to have a level of capability C(i,t) which includes two components: her ‘ability’ to function A(i, t) (for instance ‘doing’ things to escape from poverty) and her ‘potentiality’ P(i,t) (‘being’ what she expects to be using a set of endowments to avoid vulnerability). Her capability is the result of the combination of these two components, a combination which varies according to her life cycle. The capability C(i,t) is therefore as a function F(.) of two arguments [A(i,t), P(i,t)]

First, the ‘ability’ argument A(i, t) is related to the capacity of using various commodities (goods and services) through their own characteristics c(x(i,t)), in a social context that defines the rules of the game and generates the social opportunities O(i, t) to access to these commodities. This is, for instance, what a woman is able to do when trying to earn a living, to allocate her time between domestic and work activities, as head of a household in a society which does not favour women’s work. This can be written (Sen 1987):

\[ x(i,t) \text{ as a vector of commodities belonging to person i} \]
\[ c(x(i,t)) \text{ a function converting commodities into characteristics} \]
\[ O(i,t) \text{ the set of constraints, or social opportunities, the person faces, expressed by a vector of discrete functions} \]

Then considering f(.) as the person’s capacity to react in such a context, the ability argument is expressed by \( A(i,t) = f[c(x(i,t)), O(i,t)] \).

Second, the ‘potentiality’ argument P(i,t) is also related to the person’s capacity f(.) to use a combination of the various assets (physical, financial,
human, social, etc.) that she has in hand. If we call $K(i,t)$ this vector of assets resulting from accumulation over time, then $P(i,t) = f[K(i,t)]$.

The capability being a function $F(.)$ of the person’s capacity to combine both ability and potentiality dimensions:

$$C(i,t) = F[A(i,t), P(i,t)] = F.f[c(x(i,t)), O(i,t), K(i,t)]$$

If we consider that the person’s endowments include both commodities (goods and services) and assets, then $E(i, t) = [c(x(i,t), K(i,t)]$ and the person’s capability is expressed by $C(i,t) = F.f[E(i,t), O(i,t)]$. Capability is a function of the person’s capacity $F(.)$ to combine ability and potentiality, to convert her endowments $E(i,t)$ while being constrained by the social opportunities $O(i,t)$.

If we introduce the person’s vulnerability $V(i,t)$, where by definition vulnerability is a function $h(.)$ which increases with risk $R(i,t)$ and decreases with the person’s potentiality $P(i,t)$ (through the person’s capacity to use appropriate assets $f[K(i,t)]$ when facing a shock), therefore:

$$V(i,t) = h[R(i,t) / C(i,t)] = h[R(i,t) / F[A(i,t), P(i,t)]]$$

Moreover, the level of security $S(i,t)$ increases when the level of vulnerability decreases, therefore:

$$S(i,t) = k[1/V(i,t)] = k.h[F[A(i,t), P(i,t)] / R(i,t)]$$

Cited references


The Capability Approach


