Basic food income in low income countries

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The concept of basic income was mainly proposed and unfolded for high income countries. There it is meant to address problems such as growth without employment, ecologically insane growth, malfunctioning social transfer systems. Moreover basic income promotes the vision of real freedom for all. It may come as a surprise that the first country to pass basic income legislation is not a European high income country, but a middle income country from Latin America: On January 8, 2004, the Brazilian president signed a law into existence which sets up the stepwise introduction of basic income starting in 2005. The purpose of the Brazilian basic income programme is to guarantee a minimum income for all. Similar movements are at work in other middle income countries such as South Africa, Namibia, Argentina and (most recently) the Philippines. The current paper takes the issue one step further: From middle income to low income countries.

The purpose of this paper is threefold:

- To provide a model for internationally co-financed basic food income programmes in low income countries, which asks not too much from the low-income country nor from the international community;
- To present basic food income programmes as “cash transfers with just a different form of targeting”;
- To show that basic food income programmes are obligatory under the human right to food in international law.

In an earlier paper (to the 2002 BIEN conference at the ILO in Geneva) the author argued that basic food income programmes are prima facie obligatory under the right to food. After introducing the main human rights concepts (sections 1 and 2), the current paper approaches the same argument (section 7) through a discussion on the nature of targeting (sections 3 and 4). Moreover it shows (via a model for financing basic food income programmes in sections 5 and 6) that lack of resources is not a valid argument to avoid or postpone the introduction of basic food income programmes.

1. What is a minimum food income?

Minimum income programmes are regular public payments to individuals or households with the aim of safeguarding a minimum level of income (in short: minimum income). For persons without other income, state payments (social transfers) have to amount to the minimum income which is to be guaranteed. For persons with other income, the amount transferred could be smaller.

Minimum income levels correspond to the so-called poverty lines. There is a well-known international poverty line of 1 $\text{P}$: 1 $\text{P}$ is the purchasing power of 1 USD in the USA. So $\text{P}$ and USD agree in the USA - in all other countries the conversion factor into local currency will depend on a certain basket of goods chosen to define purchasing power.

There are good reasons to call 1 $\text{P}$ per day the “food security income” as it is only at this level that persons have some security to be free from hunger and malnutrition. Below this level there is a definite risk of hunger and malnutrition.

There is a discussion on “relative minimum income levels” (relating to a specific country) as a percentage of disposable personal income. The EU defines its poverty lines this way. This discussion will not be followed in this paper, which deals mainly with food security incomes and
other levels referring directly to a person’s needs rather than to society’s average or medium incomes.

Only elementary food needs can be covered by 1 $P. You can try this out for yourself. And the human right to food can certainly not be covered by such a crude quantification. Nevertheless, such income (in cash or kind) is seen as necessary (but perhaps not sufficient) for food security - and in some countries (like Zambia) more than 70% of the population has to survive on less.

There is another income level of interest in this context: The level of income below which hunger and malnutrition are basically secure: From food security to hunger security. This level is taken at 0,3$P pcpd - which corresponds to three simplest meals per day: Studies [cf. B.Schubert] show that in the rural areas of Zambia the lower limit for a transfer allowing a household one very simple meal per day is at 0,4 $P. (People there spent more than 80% of their income for food). And only the „well-to-do“ households can afford 3 meals per day. If the right to freedom from hunger calls for a guarantee that a household can consume three such meals per day, the income must be 1,2$ per day. For a household of four this would correspond to 0,3 $P per person. Minimum income levels below this value don’t make sense anymore. For this matter this level of income could be called “minimum food income”.

2. Minimum income - unconditional

Minimum income is implied by the International Covenant on Economic, Social and Cultural Rights (ICESCR) in articles 11 and 7:

Art.11
The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing ...
A person income (economically speaking) is what a person can consume without touching resources or assets. Income need not be money income - it could be cash or kind. In this comprehensive sense an adequate standard of living implies a minimum income. It is noteworthy that art.11 does not make this standard of living conditional on anything, which would have to be “tested” before it is “legitimate”. Art.11 therefore implies for an unconditional minimum income.

Even though the emphasis in this paper is on minimum income, it should be noted at this point that a standard of living does not only require income but also assets - traditionally normally in the form of working capital. Everybody has the right to share in nature’s resources and the assets accumulated by society. The concept of minimum assets is difficult to implement for obvious reasons. Proposals for implementation suggest instead an endowment once in one’s lifetime with basic capital or land. Redistributive agrarian reform is one such approach.

Art.6
The States Parties to the present Covenant recognize the right to work, which includes the right of everyone to the opportunity to gain his living by work ...
Art.7
The States Parties to the present Covenant recognize the right of everyone to the enjoyment of just and favourable conditions of work, which ensure, in particular:
a) remuneration which provides all workers, as a minimum with. ...
(ii) a decent living ... in accordance with the provisions of the present Covenant.

Art 6 and 7 together provide a right to a minimum work income - of course only if the guaranteed work has been taken up by the beneficiary of these rights. The reference in art.4.a.ii.to “the provisions of the present Covenant” refers to art.11 and indicates that minimum work income - attained with the help of the remuneration from work - must not be lower than the unconditional
minimum income.

The right to work has a lot of implications in terms of labour market policies. A subjective right to wage labour on the market, however, would go too far: Competitive employers cannot be forced to employ any unemployed person. And maintaining or expanding (for the sake of “right to work”) labour market activities which imply high ecological damage makes no sense. Such activities cannot be classified as work (defined as: recognized activities useful for others and for society including future generations). Work for wages in the labour market is only one specific from of work. A lot of care work and non profit work for the common good is done (quite often by women) without appearing in the market. It is in this “common sector” (which also includes training and education) that work can and must in fact be provided individually in the sense of art.6.

Each person then has the right to participate in the production and reproduction process of the society. States have the obligation to facilitate freely chosen work in the market sectors and to provide such work in the common sectors - and to make sure that the remuneration provides a decent income exceeding the minimum income. Persons who make no use of the opportunities in the market or common sector may not receive a decent income - but continue enjoying their right to a minimum income, of course.

The full realization of the right to food (one of the main aims of ICESCR according to art.2.1) requires not only the access of people to adequate food and resources, but also its full justiciability. The full implementation would thus allow each person without such access to sue the state (or community of states) and obtain food or the money to buy food. For this matter states must provide minimum income programmes which guarantee a minimum food income for each person threatened by malnutrition.

3. Targeting – before transfer or after transfer?

Social transfers are supposed to benefit first of all those persons who are threatened by (or suffer from) hunger and malnutrition. How can they be reached? There are basically two types of possibilities to reach this „target group“:

1) Post-transfer targeting („basic income“: targeting after the transfer)

These are state transfers to each person without a means test but with subsequent clawback of transfers (and more) from persons outside the target group. The retrieval of funds in basic income is usually done via consumption taxes, value added taxes and/or income tax. The net benefit of a person in this programme is, of course, the basic income minus the compensatory payment the person has to make to the state. If this payment is proportional to private consumption of the person, then poor people (who consume very little) have a high benefit from the programme, whereas the non-poor (who consume more) have to make higher compensatory payments and have a small benefit or no benefit at all – in fact they may through there payments contribute to the financing of the whole programme. Therefore the programme manages to allocate the programme funds automatically, efficiently and fairly without any other bureaucracy than the tax system, which exists anyway.

Examples for post-transfer targeting: basic incomes, universal pensions, universal child grants.

2) Pre-transfer targeting („selection“: targeting before the transfer)

In this approach the potential beneficiaries undergo a „test“ before the transfer is done: This selection contains for example:

- a means test to find out whether the person has the means to fend for herself or is really threatened by malnutrition.
different degrees of willingness to actively search for work, accept work or participate in work programmes
Many current welfare state measures are administrated via selection.

Selective minimum income programmes are easy to grasp and to accept because they are similar to private charity: I want that my „personal donation“ reaches the poor and nobody else, therefore I take a careful look, before I give.

Post-transfer targeting lacks this similarity to private charity. Basic income programmes are only feasible for state transfers, not for private transfers (charity) – simply because the tax system, which is the vehicle for targeting is a state system: A donor cannot clawback her donation from people who are not eligible. A state can. Against the background of private charity the post-transfer programmes seem counter-intuitive.

This background, however, is not a good advisor when it comes to judging the merits of states' transfer programmes, as the selective programmes suffer serious drawbacks compared to post-transfer targeting.

i) Many target households are not reached (too much red tape, the target group needs special knowledge and/or assistance for coping with the red tape. In Germany, for example, only 50 to 70% of the target households do actually receive social assistance.)
ii) Selection is linked to social stigma. The transfers are not seen as a right of the target group, but as their special „benefit“ or as an „achievement“ for the rest of society. Those who receive transfers are frowned upon by many others.
iii) The process of means testing is demeaning for the poor.
iv) The bureaucracy in charge of selection is costly, in some countries one needs „personal connections“ or even bribes to get the transfers.
v) Complicated selection criteria make the control of the bureaucracy's malfunctioning fairly difficult for the target groups.
vi) There is misuse among recipients and in the selection bureaucracy. Recipients can try to cheat in the selection process and bureaucracy can misuse the programmes for political reasons, providing transfers only in exchange for political support (clientelism).
vii) „Poverty trap“: In most systems of means testing, income earned will be subtracted from the benefit, amounting to 100% tax and hence as a severe disincentive to earn – and hence a disincentive to work one's way out of the target group.

Some of these „drawbacks“ are in fact relevant for the implementation of human rights, in particular:
On i): Human rights require that the implementing programmes (in particular for such fundamental rights as the right to food) must easily accessible for the target group. This is not the case in selection programmes.
On ii and iii) Human rights must be realized in human dignity. Programmes leading to social stigma (such as selection) are not acceptable and have to be replaced.
On iv and vi): The need to have „personal connections“ or to bribe bureaucrats excludes parts of the target group and is therefore discriminatory.
On v): Selection – and in particular complicated selection – is error-prone. For the victims (of intended or unintended failures) the result can be their exclusion from the programme. For fundamental rights like the right to food this will most probably mean sickness and death. Each such failure is a violation of human rights. Victims are usually not in a position to secure redress.

Basic income programmes, on the contrary, offer a number of advantages:

i) Every person knows her right (as it is very simple) and has easy access.
ii) There is no social stigma since all receive the same transfer.
iii) There is a partial decoupling of income and wage labour. Victims get a stronger position to deny demeaning and exploitative working conditions – and still be able to survive. The argument „to create job opportunities for the survival of the poor“ is often used to defend eco-destructive business. This argument will be weakened by basic income, and policies for sustainability will therefore be strengthened.

iv) Administrative cost, bureaucracy and the related misuse disappear.

v) The poverty trap disappears, since taxation of additional income is much more subtle than in selection programmes and does not act as a disincentive.

The right to a basic food income is necessary (though far from sufficient) to address the gender issue, which is linked to care-work. Care work is often unpaid or and leaves not much time to attend the fields or be active in the labour market. This puts the care-worker (for example in the family) into a vulnerable position to secure her or his minimum food income. A guaranteed minimum food income will strengthen the care-workers position and increase her or his options. There is not disincentive to take up alternative work – quite the contrary.

In family situations it is the main care-giver to the children who receives the basic food income of the children. Moreover - in a step-wise introduction of basic food income programmes, girls and women should be covered first in order to address existing patterns of negative discrimination.

How about the cost of basic income programmes? Are they not terribly expensive, simply because everybody gets a transfer? Why pay a basic food income to local elites?

The point here is that basic food income grants do not only give to local elites, they also take from them – and they take much more than they give: In post transfer targeting the transfer and the subsequent targeting must be seen together. Targeting is implemented by choosing a certain form for financing the programme, in fact targeting is identical with raising the income for the programme. The next chapter will investigate the general financial and administational consequences of post transfer targeting. The last chapter will then suggest a model for financing basic food income programmes in low income countries.

4. Post-transfer targeting: Effective and efficient

Under the assumption that food is available on accessible markets, the task of a food income programme is to provide each person below the minimum food income with sufficient cash to reach (at least) this income level. Ideally one would have to assess the income of each person, check how far this income is below the minimum food income (if at all) in order to decide how much is transferred (if at all). This kind of „income targeting“ is impossible, for all practical purposes both for individuals and households. Normally, it is the household income which is assessed.

The human right to food, however, is an individual right, not just a „household right“. There may be deprivation of women and children even in those households which – on the surface – seem to have sufficient income. Secondly under the circumstances of food insecure households, there are no clear income statements of households. Rough indicators have to be used to get a vague idea about the state of income of a household: How the floor of the house looks like, whether the roof is thatched or not, etc.. Thirdly it is a costly task to look at every single household. Fourthly one has to admit that there is room for bias and mistakes – which can amount to violations of the human right to food. Such violations can have deadly consequences – but even if they don't they are hard to address by the malnourished victims for all practical purposes - and therefore have to be rejected from a human rights point of view.

Instead of targeting on the basis of individual income, it is much easier and straightforward to target a cash transfer programme on the basis of individual expenditure: It is not necessary to assess such expenditure on an individual bases: It is sufficient to tax expenditure properly and balance such
taxation with constant cash transfers to each person: If the „expenditure tax“ is collected properly on the basis of consumption, then people who spend very little because they are poor and malnourished can retain most of the cash transferred, whereas the affluent who spend a lot will have to pay a higher expenditure tax and – in fact – carry a net tax, which in fact finances the whole transfer programme. Expenditure taxes can be designed in different ways to best reach the purpose of targeting: They could be a combination of value added taxes and excise taxes (on luxury items such as alcohol, tobacco, big cars). They could exempt staple food altogether.

The following chart illustrates post-transfer targeting for a basic income grant in Namibia amounting to a cash transfer to each person of 1 $P per day (amounting N$70 per month). The chart was communicated by Pieter Le Roux (University of the Wester Cape):

The chart brings on the horizontal axis the expenditure classes of the population starting with 25 N$ per month being the poorest class (left) and reaching 10000 N$ in the richest class. At least the poorest two classes are threatened by malnutrition. The poorest expenditure class would retain a net transfer of 68 N$ under this programme: 70 N$ are transferred and 2 have been taxed away. Even persons with no pre-transfer income at all would (after transfer) have more than a minimum food income to access the food to which they are entitled under the core content of the human right to food. Persons spending N$ 500 would still get a transfer of N$ 31. The „break-even point“ is slightly above a monthly expenditure of N$ 1000: For all classes with higher income the expenditure tax would far exceed the transfer (reaching a net tax burden of N$ 577 per month for the highest expenditure class).

It should be noted that the cash transfer programme will not change the relative income situation of participants: If person A is better off than person B, then this will continue to be the case after the transfers. In pre-transfer targeting there are usually cut-offs and thresholds to the effect that person B may be better off after the transfer than person A (for example, if B makes it into the programme and A doesn’t.) Such programme-induced „reversals“ have a considerable divisive potential between persons and communities and can make the programme unpopular among those who live close to the poverty lines and therefore carry a high risk to lose out (in a relative sense) through the programme, simply because their neighbour, who used to suffer almost the same poverty, now has additional income „rich“ through the programme.

This is further aggregated by the transfers not being gradual and „smooth“ (as demonstrated in the chart), but by the lump-sum approach (with little differentiation) which is common in pre-transfer targeting. If you make it into the programme, you get something, if not you get nothing. Moreover in pre-transfer targeting, if you are in a certain poverty class and manage to increase your income (and expenditure) you may cross one of the targeting lines, lose the transfer and therefore be worse off afterwards even though you took a considerable effort to increase your income. Using the
tax language: pre-transfer programmes can put very high taxes on additional income: If you cannot keep any of your hard worked additional income, because it will be subtracted from your transfer, this would be equivalent to a tax rate of 100%. This works, of course, as a strong disincentive to increase your income: The post-transfer targeting described in the chart does not create any such disincentive.

The grant described in the chart was meant as an „anti-poverty grant“ – aiming at a distribution of income rather than just a minimum food income. A basic food income grant could be further focused on the malnourished – with a lower break-even point without necessarily reducing the net transfer in the lowest two income classes. A mix of indirect taxes different from the one used in the example) would lead to such a result.

In theory the transfer to “higher” expenditure classes, who are not threatened by malnutrition, may be seen as an inefficiency. A sharper focus on the malnourished, however, would increase the „disincentive tax“ mentioned above and therefore – for all practical purposes – after some point not increase efficiency but hurt economic activities of the poor and therefore decrease the number of persons moving into higher expenditure classes. Thereby it prevents a reduction in the future cost of the programme. It makes future programmes unnecessarily expensive and hence works as an inefficiency. By choosing the appropriate mix of different indirect and direct taxes in post-transfer targeting an optimal result can be reached.

In order to reach long term efficiency of the programme the simplistic idea of minimizing transfer volume by narrower targeting has to be rejected. The “incentive tax” for the recipients is an important variable to be taken into consideration. In the model presented in section 6 the post transfer targeting will be tuned as to set the incentive tax for additional income at 50%.

5. Some financial and administrative consequences of basic food income programmes

There are different aspects to the cost of basic food income programmes. Consider the following example: Suppose the government of a state with 10 million citizens eligible to vote introduces a programme that hands out 100 $P to each voter entering the polling station, and then charges 100 $P when she/he leaves the polling station. What would be the cost of this – nonsensical – programme?

In a technical sense the total expenditure (without administrative cost) for such a programme is 100 $P times the number of voters – which can amount to 1 billion $P in our case if all voters make use of their right to vote. The administrative cost is very low: It is the same „voting infrastructure“ which is in place anyways and can handle this additional programme task with only a minimal additional effort of, say, 0.05 $P per voter, adding up to a total administrative cost of 0.5 million $P.

There is no net money transfer to anybody: People leave the polling station as rich or poor as they entered it. It therefore makes sense, when talking about the „cost of transfer programmes“ to distinguish between the total expenditure and the transfer volume.

What is the cost of the programme? 1 billion (expenditure), 0.5 million (administrative cost) or 0 (transfer volume)? These three figures describe a certain component of the programme: The expenditure (1 billion) is the money moved around by the programme. The administrative cost (0.5 million) is the money needed to administrate the transfer. The transfer volume (zero) is the money transferred to the target group. For all practical purposes the most important figure in describing the nature of the programme is the transfer volume: It is the transfer programme being zero which makes the programme a nonsensical programme.
Basic food income is not a nonsensical programme. Nevertheless the three aspects developed in the example are relevant. Its transfer volume would at least have to equal the funds necessary to cover at least the aggregate food deficit of the malnourished. An upper limit to this transfer volume per year would then be 360 $P$ times the number of malnourished persons in the country – assuming that 1 $P$ per day would be sufficient and that the transfer volume in post- and pre-transfer targeting is about the same (as will be argued in the annex).

The administrative cost consists of two portions: Targeting cost and disbursal cost. The administrative cost in pre-transfer targeting is considerable: The programme needs a selection bureaucracy which is engaged in means-testing or food gap determination on a case to case basis before admitting a person to the programme. This administrative task is formidable and, in fact, impossible for all practical purposes. The administrative cost of the selection bureaucracy amounts to sizeable percentages in terms of the transfer volume. Post transfer targeting, however, does not need a selection bureaucracy, as the targeting is established via the tax system, creating only minimal additional cost. Similarly, the disbursal cost in pre-transfer targeting can be considerable as there has to be a co-ordination between the selection and disbursal bureaucracies. For disbursal cost in post-transfer targeting is quite small: Ideally it is an automatic regular payment on everybody's bank account or – in countries where the target groups have no accounts – it is the cost for paying out the same amount in cash to each person via the municipality.

Altogether administrative cost for post-transfer targeting (such as basic food income) are insignificant compared to the administrative cost of pre-transfer targeting.

How about the investment cost to get the programme started? They are not different in both programmes, as expenditure and income to finance the programme are not necessarily spaced differently in both programmes.

The real difference is in the technical cost: For pre-transfer programmes the technical cost (without administrative cost) is equal to the transfer volume. For post-transfer programmes it is basic food income times the number of residents in the country. For India, the technical cost of a basic food income programme which would guarantee an income level of 0,5 $P$ per person and day would amount to 8.5 % of the GNP. This cost is technical and not necessarily relevant, as described above.

6. A model for financing basic food income programmes

In order to assess the financial viability of basic food income programmes it may be useful to obtain estimates for the transfer volume necessary. In the context of this paper such estimates can only be based on „back of the envelop“ calculations outlined in the annex. The author believes that altogether there is even a cost advantage for post-transfer targeting. There is no need for a means-testing bureaucracy: Such a bureaucracy would need sizeable funds – between 10 and 20% as the case may be. Post transfer targeting just needs a functioning tax administration (which is needed anyways). Moreover means-tested programmes have considerable opportunity cost (disincentives and poverty trap) as mentioned above.

What then is the transfer volume for basic food programmes? Obviously we will deal with a lot of money (compared to the funds involved in charitable transfers), and a good idea about the „availability of resources“ can be obtained by comparing the amount to the GNP of the country.

The model for financing such a programme is based on the following three principles:
1. In low income countries the programme will be co-financed by the international community.

Justification: The global GDP per capita and year (pcpy) is on the average some $P 7000. Countries with a GDP of less than $P 3500 pcpy can be seen as low income countries since they receive less than one half the average income. Countries with GDP from $P 3500 to $P 10500 are to be seen as middle income countries, the others as high income countries.

In the European context states see a need to address the situation of persons with less than an average income and their is an obligation to provide transfers and an EU commitment to greatly reduce the percentage of this „low income population“. In an analogous way one can stipulate global transfers to low income countries as obligatory – first of all for the fundamental human right to be free from hunger.“

Middle income countries can be expected to have sufficient resources to maintain minimum income programmes guaranteeing a level of $P 350 pcpy. This amounts (almost) to 1 $P per year and can be seen as sufficient for a basic food income.

2. The percentage of a country's own contribution to the programme grows in the same proportion as its own financial resources.

For low income countries there is mixed financing of the programme. The higher the GDP of the low income country, the higher should its own share. For simplicity we assume a linear growth of this share from 0% (for a fictitious country with GDP 0 to 100% for a country with GDP of 3500 $P pcpd.

3. The value of the country's own share should be 1 % of its GDP.

Justification: This is the order of magnitude which OECD countries (e.g. Germany) spends on minimum income programmes („Sozialhilfe“). Why not expect the same share from low income countries?

Let us consider what this model (calculated in the annex on the basis of these three principles) would mean for Zambia. Zambia has a GDP of 660 $P. 70% of the population have to make ends meet with less than 1 $P per capita per day. The calculation shows that the model along the lines of the three principles mentioned would guarantee a basic food income of $P 0,38. This covers more than the minimum food income introduced in section 1 and would be sufficient to guarantee freedom from hunger.

One of the features of the model is that the level of its guaranteed basic food income only depends on the incidence of extreme poverty (percentage of the population with incomes below 1 $P pcpd). In countries with a lower percentage of extreme poverty than Zambia the level of the basic food income grant would be higher: Countries with an incidence of 40% would guarantee a cash transfer of 0,5% and those with a 20% incidence can even secure 0,7 $P. For countries with just 10% or less of its population with incomes below 1 $P the model would guarantee a basic food income of 1 $P.

What would be the cost of the subsidiary international states obligations? If only high income countries are expected to pay the calculations (in the annex) indicate a cost of some 0.24% of their GDP. Even of this sum was simply added to current ODA the resulting volume of ODA would still be less than the 0.7% to which the OECD countries have committed themselves. For each state the percentages involved (1% nationally and 0.24% internationally) are certainly less than the obligatory „maximum of its available resources“ which the states parties to the International Covenant have to deploy towards the full realization of the rights recognized.
7. Basic Food Income Programmes: Pivotal for the Human Right to Food

There are many social transfer programmes addressing hunger and malnutrition. A pivotal programme under a human right to food is a programme which puts a certain burden of proof on states parties to the Covenant: States have to prove that they carry out other programmes which lead to the same results in terms of guaranteeing access to food. A pivotal programme is not per se a states obligation under the human right to food – but almost: States have to defend themselves if they don't run it.

Minimum income programmes are obligatory under the right to food – at least for those who cannot otherwise access to food: According to the General Comment 12 of the UN Committee on ESCR „states of the obligation to fulfil(provide) the right directly“ in such situations. What then are violations of the right in this context:

A state violates the human right to food of a hungry and malnourished person, if this person is denied access to a minimum income programme or if the person suffers irregularities in such a programme which lead to hunger and malnutrition.

A states violates the human right to food of a hungry and malnourished person systematically

(i) if the states does not prove that it has undertaken steps to the maximum of its available resources to introduce functioning minimum income programmes and it cannot be realistically expected from the person that she has access to in existing programmes,because these do not exist in the region of the person or since such access is severely hampered by the nature of the programme.

(ii) if the state can prove to have taken such steps, but failed to ask the international community for support in the introduction/maintenance of minimum income programmes.

The following two problems in selective food programmes are often dealt with on the same level:
1. Exclusion: An eligible person cannot participate in the programme.
2. Inefficiency: Non-eligible persons participate in the programme.

Exclusion, however, is most likely a violation of the human right to food, whereas inefficiency just makes programmes more expensive than necessary.

The human right to food has to be implemented to the maximum of available resources (ICESCR 2.1). Each state is obliged not to violate any person's human rights. And if such a violation occurs, remedy must be available for the victim. Such remedial measures could still secure the realization of the victim's human rights even in the case of selective programmes. Whether this can be realistically expected, however, depends on the level of the minimum income at stake.

For minimum food programmes, the result of exclusion (by failures in selection) is continuing hunger and malnutrition. This situation incapacitates the victims to an extent, that she is unable to use remedial procedures even if such procedures exist. This means that (at least) for minimum food income programmes post transfer targeting is a must, as this minimizes (deadly) failures of targeting.

Selective minimum income programmes of 0.3 $P to 1 $P cannot fully implement the right to food as a human right: This makes basic food income programmes a states obligation under the right to food.

The argument used here to show that means-tested minimum food programmes are hard to defend against universal basic food programmes in the light of the human right to food depends, of course,
on the decapacitating effects of hunger and malnutrition and cannot easily be generalized to higher levels of minimum income (for example in the sense of an adequate standard of living).

Result:

A state without a basic food income programme violates prima facie the human right to food.

In order to get rid of this onus, such a state would have to prove
- that minimum food income programmes are implemented (almost) without exclusion problems leading to hunger and malnutrition;
- that exclusion problems can be easily remedied by the victims;
- that basic food income programmes are beyond the scope of resources available and international co-financing has been sought but not found.

This state of affairs described in the model presented in section 6 will make it difficult both for low income countries and for the international community to invoke lack of resources to escape the onus of prima facie violation implied by the absence of basic food income programmes.
Annex:

Estimates and calculations underlying the model for assessing the financial volume of a universal basic food income grant.

The model is based on three principles:

1. International co-financing only for low income countries (with a GDP pcpy of less than 3500 $P). The other countries finance the programme inside their borders entirely from their own resources.

2. The low income countries' own financial share is proportional to its GDP pcpy.

3. Each low income country's allocation to a basic food income programme should be 1% of its GDP.

4. We consider as the total cost the transfer volume (without including transfer cost).

The estimate is satisfied with calculating the annual cost as 350 times the daily cost. This allows for simple calculations and a straightforward relationship between the cost for a basic food grant and the percentage of the population below a certain daily income:

We measure GDP pcpy as multiples of 3500. \( k = \text{GDPpcpy}/3500 \).

A daily per capita income of 0.5 then means that the country as a GDPpcpy of 1750 $P.

A country like Zambia with a GDPpcpy of 660 $P is then seen as a country with income 0.19.

For the calculation we consider a simple basic food income programme
- which provides a certain guaranteed transfer \( r \) (above the minimum food income) to each person;
- where the post transfer targeting amounts (for net recipients) in effect to a tax of 50% on additional income available;
- the number of net recipients is twice the number \( m(r) \) of persons with (non-programme) income below \( r \).

The transfer volume of such a post transfer programme is the same as that of a selection programme paying the guaranteed transfer sum \( r \) only to those with an income below \( r \). In this equivalent selection programme the calculations are straightforward.

The first programme (Programme 1) we want to consider is a programme transferring 1 $P to each person with an average daily income/consumption of less than 1 $P. This would in fact guarantee a minimum income of 1 $P for each person.

If we denote with \( m \), or \( m(1) \), the proportion of the population below a daily income/consumption of 1 $P, the total transfer volume \( K \) of the programme (guaranteeing a basic income of 1 SP) per person per year (counted as 350 days) can be calculated as

\[
K = m \times 350 = m \times 0.1 \times 3500 = m \times 0.1 \times \text{GDP}/k
\]

Due to principle 2 the country's own contribution is \( k \) times the total cost. Using the estimate for \( K \):

\[
kK = m \times 0.1 \times \text{GDP}.
\]

This tells us that the country's contribution (in percent of the GDP) for such a One-dollar-a-day programme is just one tenth of the percentage of people living with less than 1 SP per day. A
country like Zambia (m=70%) would have to allocate 7% of its GDP for Programme 1 to cover its own share in it.

In a second step we now generalize the „one-dollar-a-day“ Programme 1 to an r-dollar-a-day Programme r (where r is a number between 0 and 1): Let us recall that the minimum food income was introduced in this paper as 0.3 $P. The basic food income programme corresponding to this minimum food income as a guaranteed income would then be called Programme 0.3..

In order to calculate the transfer volume for such programmes we would again need to know the percentage m(r) of the population with consumption less than r $P. These data are not readily available. There are data on the „income gap“ in the income bracket below 1 $P. These would allow some fairly good estimates, but introduce lengthy extra calculations. Instead we will make the crude assumption that distribution of consumption for persons below 1 $P is linear starting with no income at all for the poorest of the poor.

It can be shown from the date available on the poverty gap (e.g. World Development Report 2000/2001) that this assumption clearly overestimates m(r) for almost all countries. Hence our estimate will be a conservative one for the cost of the programme.

On the basis of this assumption we can estimate that a share of r of the population below 1 $P has an income below r $P. Let us take the example of r=0.5: 50% of the population below 1 $P has an income less than 0.50 $P. In Zambia this would be 0,5 x 70% (=35%) of the whole population. Compared to Programme 1, Programme 0.5 covers only half the population previously reached – with only 0.5 of the per capita transfers. Hence the total transfer volume will be 0,5x0,5 (=0,25) of the previous transfer volume in Programme 1. In general: The transfer volume of Programme r is $r^2$ times the transfer volume of Programme 1.

Given the simple estimate for Programme 1, this allows us to calculate the level of basic food income which a country can guarantee with 1% of its GDP in the co-financed model:

\[ r = (m \times 0.1)^{-1/2} \]

In the case of Zambia we calculated its own share in Programme 1 as (m x 0.1=) 7%. Hence \( r = 1/7 \) and \( r = 0.38 \). 0.38 $P is then be the respective guaranteed transfer. Recalling that the true cost are less due to the overestimation of m(r) above, the level guaranteed will be higher. Even in the worst (but unlikely) case that the total population (100%) lives below 1 $P, the level reached in this model will be \( 10^{1/2} = 0.316 \), and the current model therefore guarantees the minimum food income for everybody.

What would be the cost of the subsidiary international co-financing? Among the 1.2 billion persons with an income below 1 $P pcpd 24% live in Africa, 23% in East Asia /Southeast Asia, 44% in South Asia and 6% in Latin America / Caribbean. In a crude approximation the GNP in the affected countries in East Asia and Southeast Asia is $P 3000 with m=18%, in Africa $P 1000 with m=60%, in South Asia $P 1500 with m=40% and in Latin America $P 2500 with m=15%.

The following table shows the steps in calculating the international cost per day for the different regions. The figures just given can be found in columns 2 and 6. The calculation of r from m was shown above. Column 4 simply applies the percentages in the second sentence of the previous paragraph to the total of 1.2 billion persons. This column would at the same time give the daily cost [in million $P] for programme 1. Multiplying with the factor \( r^2 \) provides the daily cost for programme r in column 5. Column 6 is used to calculate k – and 1-k, the international share. Finally the daily international cost (column 8) results from multiplying the total cost with the factor 1-k.
<table>
<thead>
<tr>
<th>Region</th>
<th>m [%]</th>
<th>r [SPpcpd]</th>
<th>Persons &lt; 1SP [mio]</th>
<th>TransferVol pd [mioSP]</th>
<th>GNP Pcpd</th>
<th>1-k</th>
<th>Intern’l Cost pd [mio$P]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>60</td>
<td>0,41</td>
<td>288</td>
<td>48</td>
<td>1.000</td>
<td>0,71</td>
<td>34,0</td>
</tr>
<tr>
<td>South Asia</td>
<td>40</td>
<td>0,5</td>
<td>528</td>
<td>132</td>
<td>1.500</td>
<td>0,57</td>
<td>75,2</td>
</tr>
<tr>
<td>East/SE Asia</td>
<td>18</td>
<td>0,75</td>
<td>276</td>
<td>155</td>
<td>3.000</td>
<td>0,14</td>
<td>21,7</td>
</tr>
<tr>
<td>Latin America</td>
<td>15</td>
<td>0,82</td>
<td>84</td>
<td>56</td>
<td>2.500</td>
<td>0,29</td>
<td>16,2</td>
</tr>
</tbody>
</table>

The total transfer volume is obtained (by summing up column 4) as 389 mio $pd. The sum of the last column (147 mio $P pd) shows the total international contribution: some 38% of the total cost. This adds up to 53.7 billion $P per year. If we assume that only the high income countries (which had a total GNP in 1999 of 21763 billion $P) contribute to the international cost, this would mean 0.25% of their GNP. Even if this sum would just be added (without replacing other ODA) to current ODA the resulting ODA is still below the 0.7% of GNP promised by the OECD countries.

These calculations allow some further observations:
Even if the OECD countries would not contribute, low income countries could still run basic food income grants – at a lower level, however. For Latin America (k=71) the transfer volume would be reduced to 71% - and hence the minimum income level would fall to 84% of its original value, had the internationally community contributed (0.84=0.71). Instead of a basic food income grant of 0,82 $P Latin America would only realize 0,69 $P.
The most serious effect of lacking international subsidies would be felt in Africa (k=0,28): The minimum income would fall to 0,22 $P – about one half of the previous minimum income and below the minimum food income of 0,3 $P. Africa therefore cannot guarantee the right to food (in this model for implementation) without international co-financing.

**Literature cited:**
Schubert, Bernd. Social Transfers for Aids Affected Households in Zambia, Lusaka 2003