3. INDICATORS TO MEASURE THE PROGRESSIVE REALIZATION OF THE RIGHT TO ADEQUATE FOOD

The selection of indicators depends first of all on what is being monitored, as indicated by the different reasons why rights-focused monitoring is conducted, as mentioned in volume I and chapter 1 of this volume. Each method of assessment, analysis and monitoring assumes that the answer to what to assess, analyse and monitor is known, and thus indicators to be used will vary accordingly.

Three classes of indicators are currently identified in relation to what to monitor: *structural (or contextual) indicators*, *process indicators* and *outcome indicators*. In the following discussion of methodological approaches and tools, it will become clear how these classes of indicators relate to what is to be measured.

*Structural indicators* are used in right-to-adequate-food assessments and in programme assessment and monitoring. These indicators measure different dimensions of legal, regulatory, institutional frameworks and socio-economic development priorities, and poverty reduction strategies and policies that bear on the implementation of policy measures, and condition the outcomes of those measures. Prime examples with relevance to the right to adequate food are:

- Legal access to land by women.
- Food safety laws.
- Existence and effectiveness of consumer protection agencies.
• Mandate of human rights institutions.
• Employment.
• Domestic trade and taxation policies.
• Priorities afforded to the most needy in development strategies.

Structural indicators may not be specific to any one human right and may equally be relevant to the realization of all economic, social and cultural rights.

*Process indicators* capture different dimensions of the design and implementation processes of policy measures and programmes. Examples of measures relevant to the right to adequate food may include: land reform, micro-credit programmes, provision of safe water, transfer of agricultural technology to small farmers, income generation programmes for the urban poor, food-for-work for displaced populations, community-based health care, targeted food price subsidies, etc.

In programme assessment and monitoring, process indicators should provide information that identifies the need for corrective policy, legal, administrative and/or operational measures to improve the programme implementation process, and bring it in line with human rights principles and approaches. These indicators are also sometimes referred to as *indicators of conduct*, in that they are indicative of the behaviour and performance of duty bearers in meeting their respective responsibilities. Process indicators can be constructed that measure answers to such questions as:

• How well are specific population groups among the food insecure and vulnerable targeted by government measures?
• Are there mechanisms that can effectively hold officials with specific responsibilities accountable for non-delivery or inadequate delivery of public services, or for inefficient or illegal use of public resources?
• Are eligibility criteria for programme benefits discriminatory, or are they applied in practice in discriminatory ways?
• How do rights holders participate in decision-making regarding programme design and implementation? Are rights holders seriously listened to, and are programmes being designed or altered in practice as a result of genuine consultations with the right holders or their representatives?
• How are public resources allocated to social programmes that are to benefit the poor? Are those resources spent efficiently? Are social services provided as welfare assistance or as programmes that aim to fulfil human rights?
Do the institutions with direct responsibilities for the implementation of policy measures or programmes have adequate capacity to fulfil those responsibilities?

Are certain programmes effective in protecting the right to adequate food?

*Outcome indicators* monitor, in conjunction with targets and benchmarks, progress with respect to the realization of the right to adequate food, and help to provides alerts when progress is not reaching targets. This class of indicator is also referred to as *indicators of results*. But if monitoring is limited to outcome indicators without linking these to process and structural indicators, there will be no information about what remedial actions are needed to speed up progress. In line with different levels of rights-focused monitoring, outcome indicators should measure the results of policy measures designed to contribute to the realization of the right to adequate food, in line with their stated objectives.

The above classification of indicators is not precise. It is important to note that a process indicator in one type of monitoring exercise may also be an outcome indicator in another monitoring effort. For example, the outcome of an agricultural extension programme may be ‘enhanced productivity among small-holder farmers in food crop production’. The same programme outcome becomes a process indicator with respect to the realization of the right to adequate food, i.e. it measures how well the agricultural extension service is performing towards the realization of the right to adequate food.

**INDICATOR SELECTION**

There are two ways of selecting indicators. One is to make an inventory of ‘candidate indicators’ that are already being produced as part of ongoing monitoring activities. Then to assess the relevance of these indicators in relation to the rights-based monitoring framework and determine the need to construct new indicators in accordance with human rights principles and approaches. This forms part of an assessment of existing information systems and current indicator gap analyses which should help identify what additional indicators are needed (see chapter 7).

Another approach is to start from the basis of a theoretical/normative framework for what ought to be monitored that is relevant to the right to adequate food.

This section presents and briefly discusses the first approach, starting with a set of guiding human rights principles and methodological and statistical considerations that helps in the selection of indicators among the many available in current inventories. An overview of inventories is given in the subsequent section.
The final section describes the second approach, based on a logically constructed framework combining the relevant rights attributes with the nature and categories of obligations to implement policy or programmatic measures in the context of food security.

It should be possible to combine both approaches. However, here is little practical experience available with applying either of the two or their combination in right to food monitoring, and field trials and testing is urgently needed.

GUIDING CRITERIA FOR INDICATOR SELECTION

There are two types of criteria to guide the development of indicators: (i) practical criteria that reflect human rights principles and approaches, and (ii) technical or statistical criteria.

Criteria reflecting human rights principles

- **ACTION FOLLOW-UP:**
  The information provided by the indicator should contribute to the formulation of action and to better informed decision-making by either duty-bearers or rights-holders.

- **USER FRIENDLY:**
  The indicator should provide clear and transparent information that the intended users can understand and that allows the users to draw their own conclusions.

- **STATE OBLIGATIONS AND CORE CONTENT:**
  The monitoring framework should include process and outcome indicators that capture the State obligations of respect, protect, facilitate and provide, as well as the core content of the right to adequate food.

- **CAPABLE OF BEING DECOMPOSED:**
  Both process and outcome indicators should be capable of being decomposed across specific population groups and/or by geographic areas. This is essential as it will help to detect discriminatory practices in the implementation process of right-to-food and other measures, examine how the outcomes of policy or programme measures impact on the realization of the right to adequate food in different population groups, or whether intended beneficiaries are indeed receiving the benefits of specific food security and nutrition programmes.

- **GENERAL APPLICATION:**
  The indicator should be generally relevant but “sensitive” to different social and cultural interpretations.
Statistical considerations

- **MEASUREMENT OF CHANGE:**
  Monitoring is about measuring change over time. The indicator should be capable of measuring inter-temporal differences with a minimum of random measurement errors, and if possible, a minimum of systematic measurement errors.

- **DISAGGREGATION:**
  The indicator has to be equally valid for all categories or classes involved in a disaggregated analysis. This is important to make valid comparisons across different population groups or different locations.

- **EASE OF CONSTRUCTION:**
  The data needed to construct the indicator should be generated, when possible, by simple measurement techniques and require a minimum of transformations. Simple measurement techniques open up more opportunities for participation in monitoring activities, while lowering costs.

- **SPECIFICITY AND VALIDITY:**
  The indicator should be specific to a given phenomenon, thus avoiding different interpretations. The indicator should also be a valid or a true representation of a given phenomenon.

What defines an indicator as a human rights indicator?

It has been suggested that a human rights indicator\(^\text{11}\):

- provides information that is presented in quantitative form and that is directly linked to human rights norms and standards;
- reflects human rights concerns and principles, and
- assesses and monitors promotion and protection of human rights.

This means that certain indicators can explicitly be constructed as ‘human rights indicators’. Other existing or to-be-developed indicators (such as food security, socio-economic and human development indicators) should meet all or some of the requirements of a human rights indicator as defined above. However, it can be debated whether human rights indicators should only be presented in quantitative form. Simple indicators, for example of the yes/no type, can still meet the other criteria of a human rights indicator. The process of indicator selection and application should be rights-based, i.e. the process should be highly consultative, continuously involving different stakeholders, particularly those who are expected to have the responsibility to act upon the monitoring results and conclusions\(^\text{12}\). This enhances transparency and stakeholder ownership. A particular suite of

\(^{11}\) Malhotra and Fasel (2005).

\(^{12}\) For example, see Andreassen and Sano (2004).
indicators that has been agreed upon should periodically be reviewed, and updated if needed, in direct consultation with rights holders or their representatives.

**INDICATOR INVENTORIES RELEVANT TO THE RIGHT TO ADEQUATE FOOD**

This section describes some existing and proposed indicator inventories. Indicator inventories need to be linked up with database inventories. A number of relevant database inventories are presented in Annex 2. There is considerable discussion and on-going research on defining lists of rights-based indicators and providing a rationale for the inclusion of certain indicators. Consulting these lists may provide guidance to monitoring teams in selecting indicators for in-country monitoring. Adoption of indicators should be based on careful analysis of purpose, information availability, technical capacity, etc. as also discussed in volume I. It is beyond the scope of this chapter to deal extensively with indicator selection to monitor policy and programme impacts and implementation. Examples of indicators have been included in the following chapters that may be adopted as they relate to different aspects of rights-focused monitoring. Lastly, only a few of the indicator inventories that are currently being developed are designed to monitor the realization of the right to adequate food, most being geared towards monitoring food insecurity and malnutrition.

**FAO Committee on World Food Security**

The list of proposed core indicators was developed to monitor outcomes at country level related to the 1996 World Food Summit goals. Some of these indicators are routinely used in the annual publication of FAO - *The State of Food Insecurity in the World*, which, depending on the theme or topic, also relies on country level data from other sources and makes it possible to undertake inter-country comparisons. The process by which the proposed list was assembled included compiling lists of indicators used by other international initiatives (FIVIMS, ANDI, OECD and UNDAF) and the examination of which indicators two or more had in common, to point to an inter-agency consensus. These were organized into two broad domains, each divided into a number of sub-domains, as follows:

- Food security and nutrition outcomes:
  - Food consumption status;
  - Health status;
  - Nutritional status.

- Outcome indicators for vulnerability:
  - Demographic conditions;
ii. Environmental conditions;
iii. Economic conditions;
iv. Political conditions;
v. Socio-Cultural conditions;
vi. Risks, hazards, shocks;
vii. Food availability;
viii. Food access;
ix. Stability of food supplies and access;
x. Household characteristics;
xii. Health and sanitation;

The above sub-domains generated a long list of indicators. To come to a proposal of core indicators to monitor the WFS goals, the following seven indicators were finally proposed:

- **Food consumption status:**
  i. Average per person daily energy supply (DES);
  ii. Energy from cereals, roots and tubers as percent of DES;
  iii. Percent of population who are undernourished.

- **Health status:**
  i. Life expectancy at birth;
  ii. Under-five mortality rate.

- **Nutritional status:**
  i. Proportion of under-five children who are underweight;
  ii. Percent of adults with body mass index (BMI) < 18.5 kg/height in metres squared.

In-country indicator working groups may want to consult this list to examine whether any of the indicators may be appropriate to include in a national list of indicators to be applied in monitoring the realization of the right to adequate food.
Office of the UN High Commissioner for Human Rights (OHCHR)

Guidelines were drafted by the OHCHR to strengthen the human rights underpinnings of poverty reduction strategies and to assist countries with the implementation of PRSPs applying human rights principles and approaches (OHCHR, 2002). Relying on General Comment 12, adopted by the Committee on Economic, Social and Cultural Rights (CESCR) in 1999, the core content of the right to adequate food is translated into five key targets.

<table>
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<tr>
<th>Target</th>
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| **Target 1: All people to be free from chronic hunger** | Proportion of people with inadequate intake of dietary energy.  
Proportion of adults and adolescents with low body mass.  
Proportion of underweight among under-five children. |
| **Target 2: Eliminate gender inequality in access to food** | Proportion of males and females with inadequate intake of dietary energy.  
Proportion of male and female adults and adolescents with low body mass.  
Proportion of underweight boys and girls. |
| **Target 3: All people to be free from food insecurity** | Proportion of households not able to have two square meals regularly.  
Proportion of household expenditures on food (out of total income).  
Variability of prices of staple foods. |
| **Target 4: All people to have access to food of adequate nutritional value** | Proportion of poor people with inadequate intake of protein.  
Proportion of poor people with inadequate intake of micronutrients. |
| **Target 5: All people to have access to safe food** | Proportion of poor people vulnerable to consumption of unsafe food.  
Proportion of people exposed to public information and education campaigns (including school instruction) regarding nutrition and food safety. |

Source: OHCHR (2002)
Achievement of these targets is to be monitored using a total of 13 indicators. The proposed indicators by key target are presented above (Box). The indicators proposed for Targets 1 and 2 are the same, except broken down by gender in the case of Target 2 indicators. There is considerable overlap between this list of indicators and those proposed elsewhere. Indicators that measure variability in market prices, need to be operationalised further, such as the current deviation from the seasonally adjusted time trend in prices. The indicators can also be further disaggregated by region, urban-rural, etc.

In response to a recent request from the inter-committee of human rights treaty bodies\(^\text{13}\), OHCHR has undertaken work on identifying indicators for use in human rights assessments. In initiating this work the Office reviewed the ‘state of the art’ on the use of indicators in human rights assessments and surveyed some of the major initiatives that have applied quantitative indicators for monitoring the implementation of human rights.\(^\text{14}\)

In June 2006, OHCHR presented the results of this ongoing work in a report entitled Indicators for Monitoring Compliance with International Human Rights Instruments to the inter-committee meeting of human rights treaty bodies.\(^\text{15}\) The report outlines the main elements of the conceptual and methodological framework for identifying indicators for use in human rights assessments, and provides illustrative lists of indicators. Currently for a first set of twelve civil, political, economic, social human rights have been formulated, including the rights to adequate food, health, housing, education, work and social security. Further validation at country level of these identified indicators will take place soon. This process is expected to yield additional tools to monitor the implementation of the principles expressed in the Right to Food Guidelines.

**Indicator Proposals of the IBSA Project**

The *Indicators, Benchmarks, Scoping, Assessment (IBSA) Project* is a collaborative project, started in 2004, between the University of Mannheim, FIAN International and the German Ministry of Consumer Protection, Food and Agriculture. It aims to develop a set of indicators to improve the monitoring and operationalisation of the right to adequate food. The effort should result in a monitoring tool that can be used in States Parties’ reporting to the Committee on Economic, Social and

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\(^{13}\) The human rights treaty bodies are committees of independent experts that monitor implementation of the core international human rights treaties. They are created in accordance with the provisions of the treaty that they monitor.


\(^{15}\) UN document HRI/MC/2006/7. The report is available in three languages (English, Spanish and French), and can be accessed at: http://www.ohchr.org/english/bodies/icm-mc/documents.htm
Cultural Rights (CESCR) to reflect the situation in their countries as monitored by national governments and civil society organisations (see chapter 9).

The first phase of the project centred on the identification of human rights indicators for the right to adequate food. During the current second project phase\textsuperscript{16}, a set of 28 indicators (many with a number of sub-indicators) that include structural, process and outcome indicators, is being validated in three countries (Colombia, Ghana and Spain).

Using certain indicators, countries can then establish their own benchmarks against which to measure progress with the realization of the right to adequate food. The benchmarks can be reassessed over time to see whether these are set too low or too high given the specific country situation and experience. The indicators that are applied, and the adjustments made over time in the established benchmarks, are to be continuously checked to see whether they remain valid.

Current proposals of indicators essentially apply the above indicator framework, linking levels of state obligations to the core content of the right to adequate food. Turning the framework into a monitoring tool a third dimension is added by measuring change over time in:

- status or outcomes in the various dimensions of the right to adequate food core content; and
- government structural and procedural response, i.e. government conduct with respect to human rights.

**Indicator Proposals from Brazil**

Discussions that are currently ongoing in Brazil\textsuperscript{17} regarding the selection of indicators take the above indicator framework as the starting point. Candidate indicators were identified, applying a set of criteria, but human rights and right to adequate food principles and approaches were not explicitly included among the selection criteria (Box)\textsuperscript{18}. It is interesting to note that the process of indicator selection took place during a period when there was an intense debate within the public sector about the scope of a national food and nutrition security policy.

One camp advocated a narrow focus on food and nutrition programmes and social safety nets, while another camp put forth proposals that look at food and nutrition security from a broad, inter-sectoral perspective, including trade, agrarian reform, and social investment issues related to food insecurity and malnutrition.

\textsuperscript{16} “Practical Application of Indicators and Benchmarks for National and International Human Rights Monitoring with Particular Reference to the Right to Food”.

\textsuperscript{17} CONSEA Indicators Working Group and ABRANDH are spearheading this effort.

\textsuperscript{18} ABRANDH (2005).
The outcome of this debate will have direct implications of what is to be monitored and thus the selection of indicators.

It can be argued that some of the criteria already point to a human rights approach, particularly in that the indicator should be disaggregated to detect inequities and discrimination, and that the indicator should be easily understood by non-technical persons. Proposed indicators should also be examined to establish the extent to which they are capable of capturing right to adequate food dimensions; whether it is a structural, process or outcome indicator; and to which level of state obligation(s) the indicator relates. Each proposed indicator can then be more easily fitted into the indicator framework.
REFERENCES SOURCES:


