Capacity Development – Sida Working Paper No. 2

Measuring an Organisation's Condition and Development

Anton Johnston

June 1999

Sida

SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

Department for Natural Resources and the Environment

Policy Secretariat for the Sector Departments

Measuring an organisation's condition and development

1. Introduction

Measuring an organisation is a sensitive act which is likely to create at the least feelings of insecurity. It is always important to measure in a context where the purposes are understood and agreed upon between the parties involved. The question of who measures and for what is one that automatically accompanies all such attempts. From the point of view of an agency for international cooperation, measuring the capacity and condition of an organisation can have at least three relevant reasons:

– to establish the base line situation, the conditions for and the objectives of a programme for organisational development
– to follow up and (in the long run) evaluate the success of support to organisational development
– as an instrument for promoting learning and participation in the process of organisational development.

These three motives do not necessarily coincide in time or in method and may not always correspond to the wishes of the owners of the organisation to be measured. Inter alia, it is usually very complicated to try to measure the base line situation of an organisation before an atmosphere of mutual trust and respect has begun to be built up between donor/consultant and "target" organisation. Thus base line studies are probably better carried out properly after (or as) an inception phase of a project rather than in the project preparation phase. In general, it is probably correct to say that any measurement which incorporates the third, pedagogical motive is likely – through constructively engaging the "measured" – to be more interesting and more successful than an entirely external, "clinical" measurement process.

There are of course large numbers of different ways of looking at the capacity, effectiveness, design, functioning and progress of an organisation. For the sake of structure we have chosen to look into the issue from three vantage points, which could be called the micro, meso and macro levels.

The *micro-level* involves the close scrutiny of the organisation from an internal perspective. It looks at personnel, funding and structure, related to the organisation's functions.

The *meso-level* is still a perspective from within, but it concerns itself also with the interplay of the organisation with its clients and external context.

The *macro-level,* which is most interesting from the institutional point of view, is the view from outside the organisation as regards its role in society and the effects of its operation.

It is of course very difficult to identify the precise position of the boundaries between the levels but the subdivision is useful to classify methodologies.

Depending on the purpose of measuring any aspect of an organisation's condition, measurement can be made in absolute and static terms, i.e. good/bad; or in relative terms, i.e. better/worse. It is very often the case that the measurer is most interested in comparison, i.e. *how* good is this organisation? Or, have things gotten better? The element of comparison can be either with another comparable organisation or a standard for such organisations, i.e. better/worse than X-organisation/Y-standard, or of the same organisation over time, i.e. better/worse than before. The issue of measurement by comparison is all too often neglected, and all too often evaluators are given the rather impossible task of measuring absolutely at the end of a project because there is no initial agreement or information on the benchmarks to be used for measuring against, or on the state of the organisation before. As noted, it can be difficult to make static base-line measures at the beginning of a development project, but it is very important for the purposes of measurement that such studies and benchmarking are established close to the beginning of the life of such a project.

Measuring an organisation is seldom an easy task. It costs time and resources, and is not to be undertaken lightly. It is important to do measuring as well as possible, because erroneous or superficial results can lead to the unhappy allocation of (dis)credit.

2. From inside – the micro-level

At this level one is working within the disciplines of (financial) audit and of organisational psychology.

The methods used to "measure" the state of an organisation are linked to these disciplines.

Within the auditing approach, scrutiny of account books and financial documentation is an obligatory feature. This is accompanied by interviews with key persons in the financial subsystem. The kind of results which are attained reflect on the organisation's capacity to use its financial resources correctly, as well as reflecting whether the organisation is working honestly or not. This form of measurement has attained a high level of frequency and intensity in development cooperation. The RRV has developed methods for rating the quality of organisational accounting, which could make it possible to compare among organisations and over time. The approach is however (perhaps surprisingly) not used very much by the aficionados of organisational development as a method of measurement. Within Sida, consult both Sida's Guidelines on Good Administration and Anders Nordström's Handbook on Auditing.

A comparable approach can be called "skills auditing". The approach consists in developing standards for what are considered to be necessary skills levels for the organisation to function properly, and then measuring the existing skills against the standards. At its simplest, the level of formal education deemed necessary for each post is specified and the qualification of the holder is compared against this. Though this can easily be quantified, the shortcomings of the approach are evident. There is no automatic correlation between schooling and competence.

A more complex version is currently being used by Sida in developing its internal training programmes. The point of departure is the "competence star" which identifies five kinds of competence (technical, cognitive, relational, functional and strategic competence) with a given content. The content is then specified per work unit and the skills available measured against this. This method has the problem of being difficult to express in statistical form, i.e. its results are very hard to quantify in order to use them as an indicator of well-being.

The organisational psychology approach is based on the questionnaire and the interview. Usually the questionnaires are based on attitude measurement, attitude scales, competence profiling and similar instruments. Questionnaires can be aimed at selected parts of the organisation or at a sample of the organisation. (It is seldom practical to aim a questionnaire at the whole of a large organisation). Very often it is the organisation's management which is in issue or which is used as the target group.

There are numbers of quasi-mathematical instruments for measuring the "profiles" of managers (a method frequently [mis]used in gossip magazines). One common one is the "Managerial Grid" (Blake and Mouton) which sets each manager the task of replying to long lists of standardised questions and then transforming the scores into points on a number of graphs, where they can be contrasted with the standardised "cultural norm" for the society in question. This is usually interesting for the individual manager and his/her boss but it may be difficult – and unuseful – to quantify collectively. Sida's management recently mapped themselves onto a collective spider web chart, as a means of identifying possible weaknesses in the leadership profile as a whole. I am not aware of similar exercises having been conducted in development cooperation — where one problem may well be, the issue of identifying what the "real" cultural norm and the "right" cultural norm might be (see Hofstede, below).

Another such instrument in frequent use in Sweden is the "Team Management Systems" approach. The approach initiates with a questionnaire-based survey of individual managers or workers, which is translated into individual profiles which are compared to the profile of the workpost the individual actually occupies. The profiles are useful for a manager to use in team leadership.

The broader survey is exemplified by e.g. Sharma, Blunt and Jones survey of the Ministry of Local Government in Botswana. All the managers of the Ministry completed the questionnaire. It is not easy to comment on the results of the exercise in this case, as there was a considerable diversity in the replies, so that no single unified picture of the state of the Ministry – other than lack of coherence, perhaps – was derived. Perhaps in other organisations the use of a similar battery of instruments would have given a more interesting result. Blunt and Jones have also provided the instruments for an "organisational type audit" to classify organisations and to identify communication problems in them. The five stereotypes they use are the simple structure, the machine bureaucracy, the professional bureaucracy, the divisionalised form, and the ad-hocracy...

G Hofstede is famous for making comparable surveys of managers across cultures and deriving from this culture-specific manager profiles for more general use. The tool could be useful for a priori deciding what kind of problems in a given country a specific organisation is likely to have. It could also be interesting to use the approach on a specific organisation and check to what extent it conforms to the Hoffstede stereotype. However, the observer tends to be a little concerned about the generality of the cultural profiles obtained and thus their specific usefulness, and indeed, to wonder to what extent they are developed from just one culture's picture of the world.

At micro-level a number of other indicators can be used to identify how well an organisation works and how harmoniously. Incidence of stress-related illness, rates of effective time in production and of personnel turnover are clear indicators of how well or poorly an organisation is functioning. Case studies of "a day in the life of" one or a few individuals can give good insight into the stresses, successes and failures inherent in belonging to the organisation in question. Blunt and Jones also provide instruments for small groups to use to identify the "force fields" in their organisation and to apply this to managing a positive process of change within it. This exercise could also provide a useful "measurement of the state of an organisation".

It is worth noting that a combination of these methods of investigation and measurement is used in making a gender survey of an organisation. The variables of interest are equality in staffing (in terms of number per each level and amount of pay for equal work), equality of power (in terms of influence, impact, decision-making rights) and quality of service (in terms of the gender bias of the services or products produced); the last of which is an issue typically to be handled at meso-level.

3. Meso-level

All the above kinds of measurement could provide relevant inputs to making a meso-level measurement of an organisation. As may be noted, they are mostly oriented to pinning down specific information as to the state of affairs inside the organisation. This picture is of course also relevant when looking from inside the organisation outwards, towards what the interplay between the organisation and its environment are.

The disciplines underlying the study of the meso-level are in principle sociology and (performance) audit.

The simplest kind of meso-level measurement regards the organisation as a kind of black box and examines what production comes out of it. It is of course useful to know what comes out of an organisation, but the explana-tions for deviations and shortfalls are necessarily to be found within.

Still an examination of output is not an altogether simple matter in itself. There are (at least) four criteria for output that need to be taken into account: sufficiency, quality, timeliness and relevance. This can be examined (qua Andersson and Winai) by looking comparatively at:

- better/worse than before
- better/worse than planned
- up to/less than demand
- better/worse than professional standards
- better/worse than comparable organisations

A more complex related form of measurement (experimented by Sjölander and Pettersson in the Northern Cape – their report is available at DESA) is that of trying to calculate cost-efficiency and cost-effectiveness. The latter in particular is an indicator at meso-level which has to take the goals of the organisation and client satisfaction into account. The results of the experiment were encouraging but required considerable skill and effort.

It is of course the case – a thesis currently being tested by UTV – that Sida:s LFA model should in theory provide us with at the least the tools to make a meso-level diagnosis. LFA:s aim is to set out a development path from an organisation's resources and activities to given levels of output and results. (The step from there to its making broad impacts and effectuating societal goals is much less developed and currently rests on a linear theory of causation, which a priori certainly has its philosophical defects). Use of LFA on an organisation to analyse its problems and goals should set up some kind of a competent base-line against which to measure future progress. It cannot be stated too often that what most is lacking in development cooperation's search for a measurement method is its coherent use of base-line studies to establish reliable data for time-series measurement – without which it is both difficult to identify what to measure against and what, if anything, has changed.

The methods of performance audit (see RRV handbook) are very applicable to measurement at this level. The performance audit relates activities to outputs and goals through a complex process of interviewing, documenting and sampling. It provides a very coherent picture of an organisation (or parts of it) which would be very useful for measuring its state. The problem with the method is its resource-intensity and time-consumption. It is not practical to do such audits more than once on a given organisation in a considerable number of years, so its use in measuring change is limited. However, a good performance audit done on a cooperating institution should be able to provide an excellent base-line against which to do more limited "developmental" studies at a later date.

Various broader management system models have been used to describe organisations. Andersson and Winai mention:

– Leavitt's model: Task-Structure-Technology-Personnel
– Kast-Rosensweig's: Goals/Values and Structural, Technical, Managerial and Psychosocial subsystems
– Peters-Waterman's 7S: Strategy-System-Structure-Staff-Style-Skills-Shared values

Such models lead almost inevitably to the check-list – a long list of questions or statements covering the various elements in the model. The ODA, DAC and UNDP had some of the more encompassing check-lists available. The problem with check-lists is that they generally reveal shortcomings everywhere and fail to indicate priorities or to allow themselves to be translated into convenient "scores" or measurements. They could however be useful in planning a performance audit and in providing indicators and data against which to measure change longitudinally.

Of high relevance for Sida has been the work of Andersson and Winai on so-called "growth models". These authors identified two in use:

Greiner's five-phase theory (indeed, maybe cyclical theory?), applicable to market organisations and capable of being used as a "siting" model:
the organisation evolves along a diagonal against the axes "small -> large" and "young -> mature" through five steps, each of which ends in a crisis and leads to a new phase:

– growth through creativity -> crisis of leadership
-> growth through direction -> crisis of autonomy
-> growth through delegation -> crisis of control
-> growth through coordination -> crisis of bureaucracy
-> growth through collaboration -> crisis of ? (ossification?)
-> unbundling? -> start again....

The model's founder gives no name to the final, in his terms hypothetical, crisis preceding armageddon...

Nelson-Burns' "High Performance Programming" model, in four stages: the reactive, the responsive, the proactive and the high-performing. The state of affairs in each stage is revealed by the use of a checklist of eleven indicator words: timeframe, focus, planning, change mode, management, structure, perspective, motivation, development, communication, leadership. Each such term is of course possible to accompany with its own measurement instrument, of which a number have been discussed earlier.

The traces of these can be identified in the model developed by Winai and Andersson and being applied at present to some degree by Sida and its consultants, the "staircase model". There are papers on the model and case studies done with the model, in Sida's possession. The model is based on step or phase thinking but seeks to crystallise out a limited number of specific indicators which will apply always and only to their respective steps, so that being able to identify the presence of that indicator will "guarantee" that the organisation has reached that phase. The four indicators chosen were:

Step 1. There is an organisation, delivering low and unpredictable output
Step 2. The organisation delivers expected output
Step 3. The organisation carries out internal changes on its own
Step 4. The organisation works actively with its clients

It should be noted that the four steps are to some degree cumulative (see Nelson-Burns above, whose first stage is "reactive" and separate, the following three progressively inclusive). It is also the case that they are indicators and not maps for a work plan. It is not enough for the management of an organisation to concentrate on it working with its clients in order for it to become a Step 4 star. Underneath each indicator lie large numbers of necessary relations in terms of goals, management, structure, resources, technique, knowledge, administrative systems etc which in fact make the organisation a Step 3 or a Step 4. Questions are also surfacing as to the model, about e.g. whether a part of an organisation can be on one level and another part on another, or whether the indicators chosen are "always and only" characteristics of the Step in question. However the model offers an interesting structure to thought by a sensitive investigator.

An interesting development of the use of measurement models of this kind is provided in the work done by Peter Winai for Sida on the evaluation and development of non-government organisations (NGOs).

Against this slightly shaky background, ÅF-SMG is currently developing an own model to measure organisational capacity. ÅF has taken the approach that the best evaluators of an organisation are the people who work in it, and they have developed a check-list approach where each item is scored by the participants in the institutional development project. Apart from providing a scorecard over time on the assessment of progress, it is a useful learning tool, as it focuses the organisation on itself, its successes and failures. DESA has offered to sponsor further development of this approach in order to use the model in its work.

There is currently a plethora of "quality control", "quality management" and "quality marking" methods on the market, many of which take as their starting point an exhaustive mapping of everything that an organisation does and then analysing at all the interfaces how the link-ups work – do papers get filed in the right place after being produced somewhere else? Etc. The perspective of each part of an organisation playing a number of roles – client, producer, marketer – is used to check whether each part plays each of these roles properly. Against this is a checklist of where things most often go wrong, where physical checkups can be made as to the functioning of internal processes. One can here refer to "Total Quality Management" (TQM) (USK in Sweden) where between the inputs to and the outputs from an organisation seven areas of activity are analysed: management, information/analysis, strategic planning, personnel development, work processes, results, client satisfaction. Much of this work is "micro" but it spills over into a consideration of the "meso" – quality, efficiency and effectiveness of the outputs of the processes and thus the organisation.

It should perhaps be mentioned that in the ?modern world, the impressive expansion of data technology in both depth and breadth is leading to the so-called re-engineering of organisations through the windows of opportunity provided by the capacity of new IT-systems. To quote: "The vast infrastructure built for an obsolete world of paper-shuffling will no longer be needed" (J Martin). This technology introduces a new set of criteria into the measuring of organisations as well as new opportunities for measuring organisations and their performance. It is apparently the case that modern networks give managers possibilities of control of the smallest events in their company that they could never dream of before. Examples include employee's time at work, time on task, productivity (measured inter alia by the "stroke-count" or number of strokes on the computer keyboard per hour), access to complete copies of drafts etc. Criteria for measuring an organisation will include norms on keyboard use, criteria on organisational "delayering" and "flatness" and the like. "The great corporation of the future will have highly disciplined overall leadership of many autonomous units, each doing the most excellent job it can within a framework architected by information engineering" (Martin). These problems and possibilities are not likely to be available in most of Sida's cooperation partner organisations in the nearer future so I will glide smoothly over them....

4. Macro-models

As referred to in relation to LFA above, there is still a large credibility gap between outputs/results and impacts/effects. In similar vein, the investigation of the macro-level context of an institution is much less developed than the other two levels of organisational measurement. Models for measuring the state of affairs at macro-level can be identified as a set of investigative techniques which are still in an early stage of development. Their discipline of origin is macro-economics. Their purpose for our area of interest could be defined as measuring the relevance of societal institutions.

On the economic side, we have a set of investigatory techniques being applied by the World Bank under the name of Public Expenditure Reviews. These reviews identify all income and expenditure and the agents thereof and relate that result to the (stated) goals and aspirations of the government in question. These reviews have been extremely revealing, though they too are extremely costly, personnel-intensive and controversial as to the reality and meaning of their results. The World Bank also orders countries on a GNP/capita rating, which of course demands considerable amounts of measuring skills to derive. Even more broadly, international banks and credit institutions do comparative surveys of countries (Moodly's, Standard & Poor) and assign them alphanumerical credit ratings, as does Transparency International in terms of a rating on corruption, based on questionnaires to chosen firms in the business sector.

On the structural side, the business of Civil Service Reform is often driven by preceding investigations into public expenditure and into the topic of system capacity. Studies have been carried out for example by the World Bank into "total capacity" in countries like Mozambique, where an extensive mapping has been done of the output of the education system and its absorbtion into the public service. On a global scale qualifications have been compared to needs (and usually found to be extremely wanting). The Mozambican study took a full year to do. It is revealing but static, in particular because countries undergoing economic stress reveal very high personnel mobility.

The UNDP has brought out a handbook on "Process Consulting" which goes somewhat further than the basic checklist approach does. It advocates a work method for leading CSR in a number of dimensions. It attempts to set up some matrices for examining the state of affairs and deriving conclusions as to what should be done about it. It is, however, very donor-oriented and its primary aim is not measurement.

Sida has tried to develop a simpler method of sample surveying of a full public administration. There is a paper on this (Johnston) and it has been tried and developed in two countries (Mozambique and Namibia). A proposal to do the same thing in South Africa led finally to a presidential decision to make an holistic analysis instead, whcih Sida part-financed but did not participate in. However, some suggestions for the methods and contents of the South African review went further than previously, notably:

– the idea of making a specific ethics and corruption study
– the idea of doing a consumer satisfaction study
– the combination of sample surveying with expenditure reviewing.

This leads into the other side of public sector activity: the promotion of democracy and human rights. Here the instruments of review are also many and varied, but few are cast in terms of measuring the situation (apart from statistics on the number of violations). Uppsala University and an American foundation (Heritage?) have developed numerical methods for making democracy measurements of a country. And of course the UNDP has come some way to nuancing the banality of the GNP/capita measurement with its human development index and its gender empowerment index.

There remains however the gap between macro-analysis and the place of (in particular state) organisations in it. In Namibia, we asked the question: "Has Namibia got a good Central Bank through our support?" It is decidedly easier (though not easy) to answer the question as to whether the Bank functions well internally than whether it plays its proper part as a leading institution in a new democracy. Gustavsson has however recently demonstrated to Sida an idea at the macro-level which has the benefit of linking the macro and the meso levels. This matrix includes a set of variables under both the "economic" and the "democratic" dimensions of a public sector which could perhaps also be applied to specific institutions and organisations in the public sector. This will be the subject of further development next year.

Anton Johnston
DESA
1998 12 07
1999 02 23
1999 07 29

Measurement of Organisational Development

LEVEL	DISCIPLINE	FOCUS
MICRO Internal	Psychology (Financial) Audit	Individual competence Personnel profiles Work relationships Department
MESO Interface	Sociology (Performance) Audit	Efficacy Work goals Outputs Systems/Organisation
MACRO External	Macroeconomics – Public Expend. Review Political Science – Public Sector Reform	Effects Service provision Societal goals “Apparatus”

SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
S-105 25 Stockholm, Sweden
Tel +46 (0)8 698 50 00 Fax +46 (0)8 20 88 64
Homepage: www.sida.se