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Working Paper

INDICATORS FOR MONITORING AND EVALUATION: A PRACTICAL GUIDE FOR THE EUROPEAN FISHERIES FUND

*Revised version following the adoption of the EFF Regulation by the Council and
the EFF implementing regulation by the Commission.*

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1. INTRODUCTION

1.1. Objectives of the Working Paper

This working paper has two major objectives. First, it provides an introduction into the methodology of indicator systems as a management instrument in the framework of the European Fisheries Fund (EFF) Operational programmes; and, second, it provides practical guidance for the authorities and stakeholders in Member States that are responsible for an EFF Operational programme.

As guidance, the working paper suggests what a Member State should include in an Operational programme that will be adopted by the European Commission. The methods and approaches presented in this working paper are of an indicative nature. They need to be applied in a creative manner. The working paper encourages for a common development and further improvement of indicators in an EFF Operational programme.

Indicators in the meaning of this working paper are just one of several instruments used in the context of monitoring and evaluation. They should help Member States and the Commission to move to more results-driven public management.

Evolution, not complete revision

The use of indicators for monitoring and evaluation in the framework of the Financial Instrument for Fisheries Guidance (FIFG) became established practice in the mid 1990s with the informatics application INFOSYS for all structural interventions in the FIFG. The 2000-2006 programming period brought about substantial progress in the systematic application of INFOSYS for all FIFG structural interventions. The indicator systems performed better, contributing to more effective programme management.

The challenge for the 2007-2013 programming period is to improve and better communicate the main ideas, not to revise it completely.

It should be recalled that INFOSYS will not be obligatory for the Member States during the next programming period 2007-2013. However, Member States should ensure an adequate monitoring of the Operational programmes and the accounting records of operations and the data on implementation referred to in Article 59 (c) of EFF Regulation shall include the information set out in Annex III of the EFF Implementing Regulation which is close to the current INFOSYS for the measures already existing in FIFG and adapted for the new EFF measures not existing in FIFG.

More focus and user orientation for the indicator system

In the 2000-2006 programming period FIFG programmes made significant progress in the coverage and quality of their indicator systems. On the other hand, some systems had a tendency to become complex and were insufficiently driven by the needs of the users. The objective for the 2007-2013 programming period should be to establish systems of indicators with a clear orientation towards users at different levels, eliminating unused ballast and improving the remaining indicators. In designing such systems, more attention should be paid to the different uses of indicators during the processes of monitoring on the one hand and evaluation on the other.

More strategic character

In the 2007-2013 programming period Member States and the Commission will give their partnership a more strategic character. This means that an EFF Operational programmes fix only longer term global objectives by priorities axes which consequently are transformed by the Member States into more operational, shorter terms objectives that take into account a changing socio-economic environment in the fisheries sector. The experience from the 2000-2006 generation of FIFG interventions proves that a higher quality of quantification and measurement of result indicators in particular is a *condition sine qua non* for this goal.

Priorities linked to EU policies

The more strategic character of programming period 2007-2013 is also characterised by a reinforced link between EFF Operational programmes and the major EU policies, such as Sustainable development, the Gothenburg and the Lisbon strategies, as expressed in the Guiding principles foreseen in the Article 18a of the EFF Regulation. Indicator systems should aim to reflect those links, taking account of the indicators used for reporting or for setting targets in these strategies.

2. MULTIPLICITY OF STAKEHOLDERS, EFFECTS AND DATA

EFF Operational programmes set comprehensive objectives that touch upon many factors contributing to the objectives of the Common Fisheries Policy (CFP). The Operational programmes include a relatively wide range of instruments, expressed in the form of priority axes. Member States translate specific priority axes into several measures.

The design and implementation of an EFF Operational programme need the commitment and work of a multitude of stakeholders. This process does not only deliver outputs, results and impacts of an Operational programme, but influences and changes the capacity (knowledge, working methods, social competences, etc.) of the stakeholders themselves.

The implementation of the Operational programmes involves different administrative levels and other stakeholders, such as socio-economic partners, intermediate bodies, Managing authorities, Member States and the European Commission. These actors have different roles and different information needs. In designing the monitoring and indicator system there should be a clear understanding of who needs what information and when.

An **intermediate body** first of all is interested in a broad set of information concerning the measure it is responsible for. The intermediate body has to keep under control the physical execution of operations (projects) and the measure as a whole and might find it useful to use physical output indicators for this purpose along with financial indicators. In addition, the implementation agency is likely to be interested to complete the picture on the other outcomes of the projects as reflected by result and impact indicators.

If there is an intermediate body, the **managing authority** of the Operational programme is likely to need less detailed information about this specific measure of the intermediate body and very little information about individual projects. The information needed by the managing authority is related to the objective of the different priority axes of the programme. The appropriate indicator type here could be result and impact indicators.

The managing authority could be interested in output indicators for other reasons, e.g., for the measurement of efficiency (unit costs) of different intermediate body.

The EFF Implementing Regulation does not require output indicators in the Operational programme, which are mainly for monitoring of the Operational programme by the Member State.

The main interest of the **European Commission** lies at the programme and priority axes level, i.e., the respective result and impact indicators (Annex I of EFF implementing regulation). Nevertheless, some output indicators can supplement this information.

In establishing the indicator system of an Operational programme it is necessary to keep in mind that each intervention delivers a diversity of data and effects. The challenge is to select and to record data that is relevant for the users at the different levels. Not all available information should be recorded and transmitted to every level.

3. MONITORING AND EVALUATION

Monitoring and evaluation are two closely linked concepts. Nevertheless, one should be clear about their different objectives and functions in order to design a successful indicator system.

3.1. Monitoring

Monitoring is essentially the checking of outturns against expectations. It is generally relatively easy to monitor the values for output and - with some more effort required - result indicators.

Definition used in the guide “Evaluating EU activities – A practical guide for the Commission services (DG BUDG, July 2004):

“**Monitoring** is a continuous and systematic process carried out during the duration of an intervention, which generates quantitative data on the implementation of the intervention, but not usually on its effects.

The intention is to correct any deviation from the operational objectives, and thus improve the performance of the programme as well as facilitate subsequent evaluation.”

3.2. Evaluation

Evaluation involves interrogating information from monitoring and other sources to find out and explain the effects of the interventions. Evaluators use the data delivered by the monitoring system, including output and result indicators but taking into account that the most important instrument used here is an impact indicator. Impact indicators move away in time from the action (specific impact indicators) or from the beneficiary (global impact indicators). The challenge for evaluation is to distil net effects from gross effects. The move in time and link with the beneficiary often will make it impossible to create impact data as easily and reliably as values for output and result indicators.

Indicators represent a major source of information on which evaluations are based and they will be used at the different evaluation stages.

Indicators are most frequently used to measure effectiveness and efficiency ratios which can be calculated for each programming stage.

It is necessary to decide in the process of the Operational programme elaboration which indicators can be gathered from monitoring and which need inputs from evaluation.

The following types of evaluations are foreseen in the EFF Regulation

Ex ante evaluation

The tasks of the ex ante evaluation concerning indicators are outlined in the Commission working document n° 5864 of 8 May 2006.

Interim evaluation

Evaluations undertaken during the programming period should examine the degree of effectiveness and efficiency achieved by the Operational programme under evaluation on the basis of indicators collected by the monitoring system and/or by an autonomous appropriate field work. It should also assess the quality, relevance and the level of quantification of these indicators.

Ex post evaluation

The **ex post evaluation** – carried out by the Commission - in addition to a final assessment of effectiveness, will concentrate on questions of utility and sustainability. Impact and result indicators are likely to be the most important indicators at this stage of the programme cycle. For this purpose, ex-post evaluations are likely to involve – in addition to the monitoring data – methods typical for those indicators. The Commission will need the close cooperation of the Managing Authorities for the success of this evaluation, especially in relation to the provision of data.

4. INTERVENTION LOGIC

4.1. Needs and intervention

The starting point of each public financial intervention in the fisheries sector is an analysis of the situation in the fisheries sector with an identification of problems or **needs**. Such needs can be measured in financial and physical terms.

The next step is the consideration of whether or not a publicly financed EFF Operational programme (a financial input) is an appropriate instrument to address such needs. The underlying – often economic – explanatory model defines which specific **instrument** is to be used to achieve the **objective**.

If a decision in favour of an intervention has been taken, the question arises, to what degree a certain budget will deliver the objective under consideration (or: how much money is needed to achieve a defined objective?).

Two additional important points should to be taken into account. First, the situation in the fisheries sector is influenced by multiple factors, by a multifaceted **context**, the

public intervention being just one of the factors. Second, public interventions can have unintended consequences, either positive or negative.

Figure a: The Logical Framework

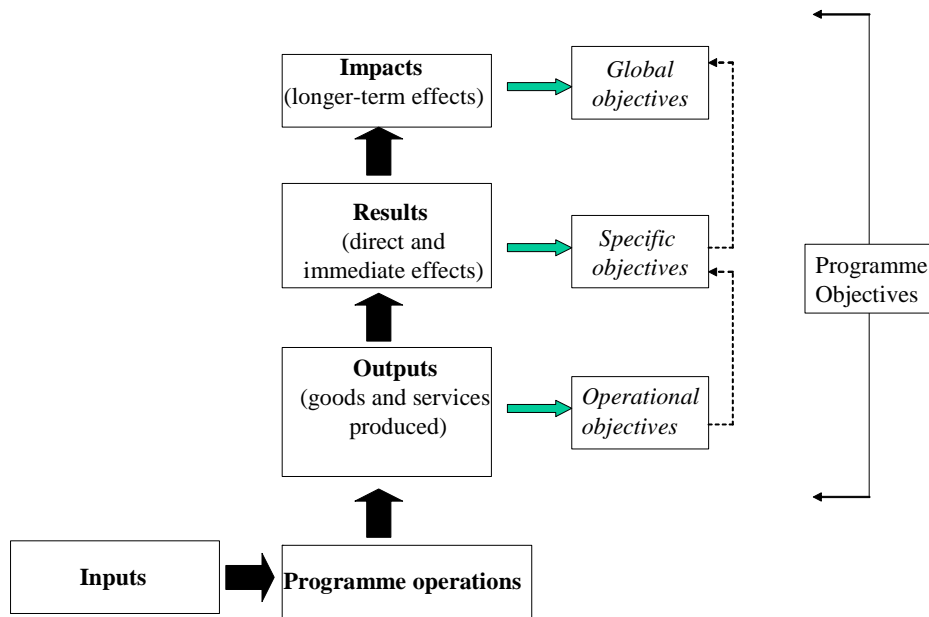
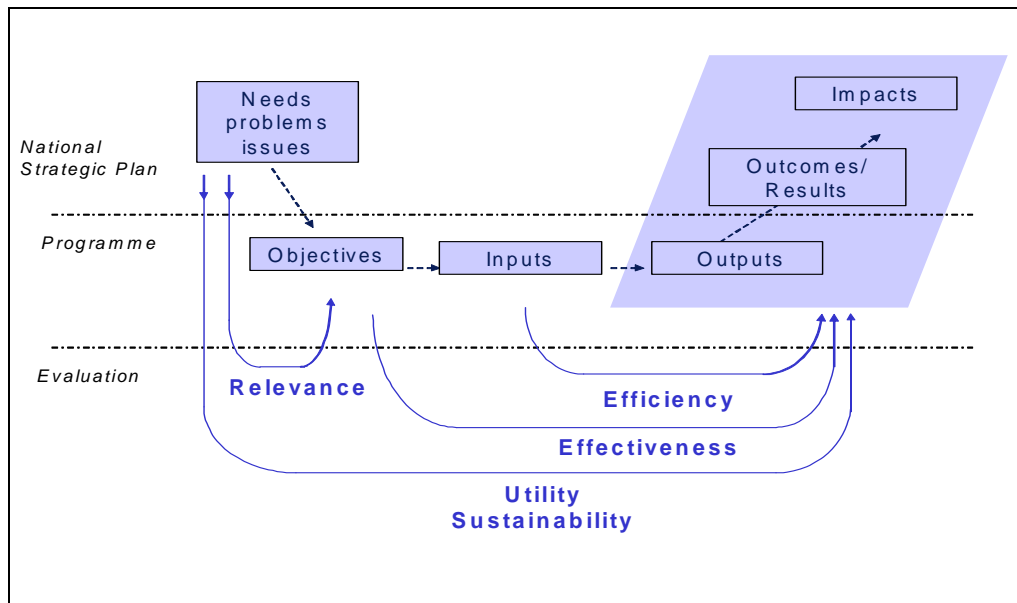


Figure b: The Operational programme and its environment



Relevant evaluation issues

Relevance assesses the links between the defined objectives and the existing socio-economic problems to be solved by an intervention.

Effectiveness compares what has been done with what was originally planned, *i.e.*, it compares actual with expected or estimated outputs, results, and impacts.

Efficiency looks at the ratio between the outputs, results, and impacts and the inputs (particularly financial resources) used to achieve them.

Utility checks whether the impact obtained by an intervention correspond to society's needs and to the socio-economic problems to be solved (it disregards all reference to stated objectives of an intervention).

Sustainability assesses the ability of the Operational programme effects to last in the middle or long term after the funding of an intervention has ceased.

Priority axis and measures, *i.e.*, in terms of output, result, and impact.

Table: Effectiveness and efficiency of indicators at different programming level

Objectives	Indicators	Effectiveness	Efficiency
Measure	Financial/physical output	Actual/planned output	Output compared to cost
Priority axis	Result (impact)	Actual/planned results	Result compared to cost
Operational programme	Impact (results)	Actual/planned impact	Impact compared to cost

4.2. Main evaluation questions

As a broad outline, the evaluation should answer the following questions:

Relevant evaluation issues.

Relevance assesses the links between the defined objectives and the existing socio-economic problems to be solved by an intervention.

Effectiveness compares what has been done with what was originally planned, i.e., it compares actual with expected or estimated outputs, results, and impacts.

Efficiency looks at the ratio between the outputs, results, and impacts and the inputs (particularly financial resources) used to achieve them.

Utility checks whether the impact obtained by an intervention correspond to society's needs and to the socio-economic problems to be solved (it disregards all reference to stated objectives of an intervention).

Sustainability assesses the ability of the Operational programme effects to last in the middle or long term after the funding of an intervention has ceased.

Priority axis and measures, i.e., in terms of output, result, and impact.

5. INDICATOR SYSTEM

5.1. Definition of indicators

Definition: What is an indicator?

An indicator can be defined as the measurement of an objective to be met, a resource mobilised, an effect obtained, a gauge of quality or a context variable.

An indicator should be made up by a definition, a value and a measurement unit.

Seen from a bottom-up perspective, the public financial intervention – the **input** - in the first instance produces some (physical) **outputs**, which are the direct result of a certain **operation**, e.g., gross tonnage (GT tonnes) and total power (Kw) scrapped. The respective beneficiaries will obtain through these outputs some advantages, such as a better balance between fishing capacity and resources available and improvements or benefits for the overall fleet in the example given. These effects are called **results**. Usually an intervention will affect not only beneficiaries, but through them cause more changes in the fisheries socio-economic environment. The effect, such as, for instance, a higher GDP in the fisheries sector are called **impacts**.

Definition: input, output, result and impact indicators

Input indicators refer to the budget allocated to each level of the assistance. These are financial nature indicators. **Financial** indicators are used to monitor progress in terms of the (annual) commitment and payment of the funds available for any operation, measure or Operational programme in relation to its eligible cost.

Output indicators relate to activity. They are measured in physical or monetary units (e.g., Gross tonnage (GT) and total power (kW) scrapped, etc.).

Result indicators relate to the direct and immediate effect on beneficiaries brought about by an Operational programme. They provide information on changes to, for example, the behaviour, capacity or performance of beneficiaries. Such indicators can be of a physical (reduction in number of vessels, etc.) or financial (leverage of private sector resources, decrease in operational cost for fishing, etc.) nature.

Impact indicators refer to the consequences of the Operational programme beyond the immediate effects. Two concepts of impact can be defined:

- **Specific** impacts are those effects occurring after a certain lapse of time but which are, nonetheless, directly linked to the action taken and the beneficiaries.
- **Global** impacts are longer-term effects affecting a wider population.

5.2. Quality requirements

5.2.1. Proportionality

The Regulation introduces the concept of proportionality. The scale of the Operational programme should be considered when defining the indicator system. In particular for the measurement of impacts, methodologies used should reflect the size of the interventions.

The indicator systems of complex programmes with a high number of priority axis and measures will necessarily be more difficult to manage than the system of a smaller programme. The challenge is to design indicator systems as complex as necessary and as small as possible under the specific circumstances of a specific Operational programme. The aim is not to achieve an equal coverage of all programme and priority axis objectives. The impact and result indicators should cover priority axis or measures which represent the bulk of expenditure or are of strategic importance from the point of view of the Operational programme objectives or the information needs of the potential users.

5.2.2. Quality check

The Commission invites the competent authorities to undertake a quality check of the indicators identified for the Operational programme. This check should cover the system of indicators for questions such as:

- coverage,
- balance, and
- manageability.

Individual indicators should be assessed using the following quality criteria:

- relevance,
- sensitivity,
- availability,
- costs.

An Operational programme that is concentrated on a limited number of priority axes is likely to generate a higher impact in the selected areas which can be reflected in a limited set of indicators.

The quality of an indicator system depends directly on the clear understanding of the intervention logic of an Operational programme, i.e., the link between measures¹, priorities and the programme level. Every priority axis should make explicit the channels through which a certain intervention is expected to affect the situation of the fisheries sector.

As an example, what is the mechanism through which incentives to scrapping vessels are supposed to enhance the competitiveness of the fleet? The answer to this question will guide the selection of the appropriate indicators. Indicators in this context should be seen as an instrument that helps to clarify the content of measures and priority axes. Difficulties in identifying an appropriate indicator are very often the expression of an insufficiently understood action.

5.3. Programme indicators

The Operational programme can include the wide variety of programme indicators.

Input indicator are mainly linked to the monitoring of the programmes, output indicators to the specific objectives of the programme while result indicators linked to the general objectives of the programmes.

The ultimate objective of EFF assistance is to ensure sustainability of fisheries activities and benefits impact in the fisheries sector, measured as far as possible by impact indicators. In an ideal world strategic decisions of programme managers such as programme revisions should be based on impact indicators. The difficulty is that impact indicators by their nature are often available only after a considerable time lag and they often need substantial methodological input in order to be valid. Output indicators, on the other hand, deliver only information about the physical, not the socio-economic, effects of an action. In practical terms this gives a special importance to result indicators for the management of an Operational programme as a whole during the implementation of an intervention.

¹ Measures are not anymore part of the Operational Programmes in the programming period 2007 – 2013.

The Commission wishes to encourage the Member States to concentrate their efforts on the improvement of result indicators, particularly of those that will be used to define the objectives of each priority axes.

Such efforts should cover all elements contributing to the quality of an indicator: a sound analysis of the context, the understanding of the assumed causal chain, a clear definition, a baseline, a definition of the measurement method and a quantified target. Some result indicators might need additional preparatory work in order to make the needed information available.

5.3.1. Impact indicators

Impact indicators by their nature ask for more developed arrangements to obtain meaningful values than is possible for data that can be obtained from the monitoring system. An improvement in the economic situation, for example, might be due to factors external to the Operational programme. In many cases, only evaluations will be capable of delivering reliable information. As this work can demand quite substantial efforts, it is reasonable to define impact indicators only for the most important (e.g., in financial terms) priority axes of a given Operational programme.

For the same reason, the Commission advocates a step by step approach. In many cases it may improve the effectiveness of the indicator system to concentrate the limited resources on the establishment of reliable, measurable result indicators of good quality rather than to create impact indicators of questionable value. Such result indicators are a necessary building block for a subsequent development of impact indicators.

Both indicator types need a sound explanatory model as their basis. A collection of data without a model explaining the causal chain is not useful, as the establishment and explanation of values would remain an unsolved question.

Such research needs careful planning well in advance, including the necessary financial means. Appropriate techniques could include case studies, surveys, or the use of control groups. Other instruments are sector specific, econometric or macroeconomic models. The Commission emphasises the role of primary research on beneficiaries for the reliable assessment of impacts.

5.4. Baseline data

5.4.1. Baseline data

Baseline data refer to the initial value against which an indicator is subsequently measured. Baseline data are indispensable if programme indicators are to be meaningful because they put the measures of a programme into their context. It is the instrument to understand the relative importance of a EFF intervention in relation to the existing situation, the needs and national policy instruments. For example, if the aim of a measure is to increase the value of fish products processed in a region, the most appropriate baseline data are the existing value of the fish products processed at the start of the Operational programme.

Baseline data are gathered primarily from official statistics. Sometimes, however, these sources can be problematic. Typical problems include:

- the non-availability of data at an appropriate geographical level;
- the non-availability of data that is sufficiently disaggregated by sector;

- delays in the publication of data; and
- gaps in official statistics in relation to the requirements of the programme (for example, the distinction between full-time and part-time workers might not feature in official statistics);

In some cases official statistics will need to be supplemented with surveys or, possibly, indirect indicators. It may be useful to collect specific data concerning the beneficiaries of the Operational programme.

5.4.2. *Baseline – two approaches*

In defining baselines one can distinguish two approaches with different information values:

a) *Static concept*: The concept, used for most of indicators in the FIG programmes, is confined to a simple statement of a value for an indicator at a certain reference point in the past (Figure c). For example: the number of tonnes of fisheries products processed in a certain year. Some programmes use an even simpler instrument by providing a reference value for measures in the past by the same or a similar instrument. For example: number of vessels modernised by the programme in a certain period of the past. Even if such a reference value is not a proper “baseline”, this instrument can help to understand the planned instrument better by putting it into relation with past activities.

b) *Dynamic concept*: A more demanding definition is the dynamic concept of a baseline (a baseline scenario or counterfactual situation). Here one projects the value of a certain indicator during the programming period (Figure d).

The dynamic concept requires the use of a variety of techniques, which can be of very different ambition. An important issue that can be relatively easily integrated is the planned intervention of national public funds. For instance, for many infrastructural priorities this information will be the most important factor determining the counterfactual situation without EFF intervention. .

Which approach should be used?

The decision on the appropriate approach for baseline data (static or dynamic approach, use of reference values) should be done in such a way that

- the most important parts of an Operational programme (in financial and/or strategic terms) use a more developed approach,
- the specific dynamic features of an intervention area are correctly reflected. This means for instance that a region with a developed ports infrastructure, that is likely to see little change in the future could use the static concept, whereas a region lagging behind undertaking significant efforts by its own and national funds for ports equipments should use a dynamic concept for the baseline.

In most cases the static approach will be sufficient for the purposes of an Operational programme.

Figure c. Static concept

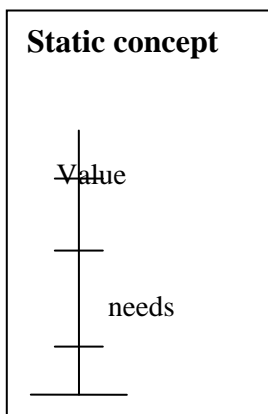
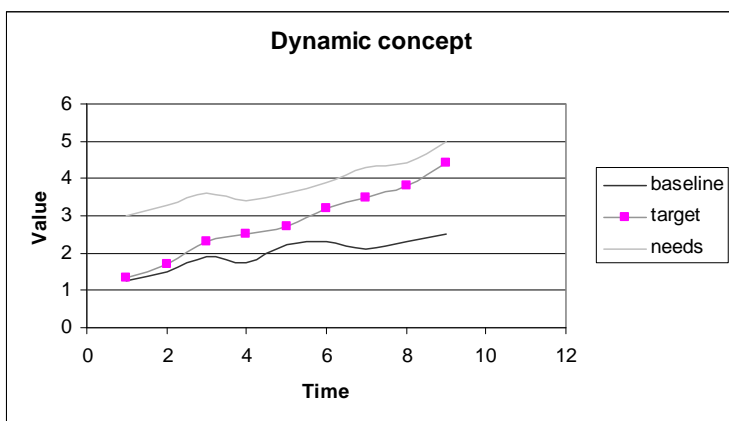


Figure d. Dynamic concept



5.5. Quantified targets

One of the most important overall objectives of the programming system for the EFF is to facilitate the transition from a primarily input-driven implementation system of the development of the fisheries sector to a results-oriented system. The output, result and impact indicators should be an instrument for this purpose. This consideration explains the important role of ex ante quantification of the Operational programme objectives. Ex ante quantification is one of the most demanding exercises in establishing an indicator system.

Indicators need quantified targets because otherwise the extent to which the original objectives are being met cannot be measured. Inevitably, as with all such forecasting exercises, an element of judgement is required in addition to data processing.

Two instruments can be used for the quantification of targets: the use of historic time series and the use of reference values drawn from prior monitoring and evaluation exercises:

- Time series together with a clear understanding of explanatory factors in an ideal case will stem from the fisheries sector analysis and the development of a baseline as

described above. The insights gained can serve as basis for an extrapolation, reflecting the intervention of an Operational programme.

- Benchmarks of fisheries products offer a further source of information for quantifying the objectives associated with measures and enable the effectiveness and efficiency of the operations in question to be compared. Such data should be used with caution, as the specific conditions for different programmes may not be the same.

The achievable quality for the quantification of targets at priority axis and the Operational programme level will depend on the quality of the quantification at the measure level. In this context the Commission recommends that **all outputs should be quantified** at measure level. In a next step, attention should be concentrated on the quantification of **result indicators** for the most important parts of an Operational programme in strategic and financial terms.

5.6. Main indicators

The Operational programmes can include a large number of indicators, reflecting the wide variety of interventions and users needs. The Commission also has information needs but these relate to a more limited subset of indicators.

The EFF regulation emphasizes the need to describe the objectives of each priority axis in terms of expected results. They should be explained where appropriate, in a qualitative and quantitative manner in the National Strategic Plan and in the Operational programme.

Programme monitoring will pay particular attention to the attainment of those objectives and results. In most cases it will be possible to define appropriate indicators which can capture the core elements of the expected changes. These indicators will be used, when appropriate, with quantified targets.

In some cases, these indicators will assume another important function: when they can be derived from more general policy frameworks, such as the Common Fisheries Policy, they will describe the contribution of EFF to this policy.

Usually the wide variety of programme indicators is not directly comparable between Member States. Therefore, the Commission wishes to encourage the use of common minimum core indicators where appropriate to the content of the Operational programmes.

Common indicators are physical and financial indicators, which can be used to make comparisons or aggregations of data across programmes, priorities or measures between Member States.

The number of common indicators must be small to ensure that they are appropriate and manageable with regard to programme monitoring and comparative or thematic analyses.

Common indicators are of special importance for the information and accountability needs of the Commission.

Annex 1 of the working paper lists the common minimum indicators which the Commission suggests that Member States apply in the EFF operational programmes, wherever appropriate.

6. INTEGRATION OF HORIZONTAL ISSUES

General principles

Member States should integrate horizontal objectives of different nature in their Operational programmes. Such themes could be sustainable development of fisheries sector, equal opportunities, environment issues and many others. In doing this some general principles can be helpful:

- The monitoring and evaluation of horizontal themes should be embedded into the general indicator system of an Operational programme and not be separated into a specific indicator system.
- Indicator systems for the EFF interventions should be decision oriented. Data should not be collected without clear purpose.
- The establishment of any indicator system is costly. Indicators for horizontal priorities should be applied first of all for measures that have a significant impact on a given horizontal theme.
- It is recommended to use a step by step approach. It is equally important to be open to experiments and to find out good practices. For example, one and only way to implement sustainable development does not exist; it depends always on the situations and priorities concerned which can vary considerably.

Breakdown of data by gender and by size of recipient undertakings

Taking account of the general principles outlined above, Member States should be aware of Article 11 of the EFF Regulation requiring that, where the nature of the assistance permits, the statistics shall be broken down by sex and by the size of the recipient undertakings.

7. ESTABLISHMENT AND USE OF THE INDICATOR SYSTEM DURING THE PROGRAMME LIFECYCLE

Indicators need to be considered through all the phases of the EFF Operational programme management cycle:

- planning and programming,
- implementing structural interventions,
- evaluation.

Decisions and actions can be influenced by information provided by the indicator system at each of these stages. Therefore, it is crucial that the structures of the system as well as indicators themselves are tailor-made to users' needs at each stage of programme management.

7.1. Planning and Programming

In most cases the future Managing Authority of the Operational programme will take the lead for the elaboration of the indicator system.

7.1.1. Coherence between National Strategic Plan and Operational programme

The authority responsible for the National Strategic Plan together with the Managing Authority of the Operational programme should assure, whenever appropriate, a coherence of indicators used in the NSP and the Operational programmes.

7.1.2. Coherence with indicators of established EU policies

The Managing Authority of the Operational programme should assure, as much as possible, the use of the indicators for Operational programmes included in the Annex I.

7.1.3. Integration in programming

The establishment of the indicator system should be **integrated in the Operational programme planning at an early stage**. The inherent need for precision of definition and the quantification of objectives can contribute substantially to the quality of the programming. In addition, experience proves that an indicator system is effective when it starts to measure the Operational programme implementation from the very beginning.

7.1.4. Establishment and management in partnership

The potential users of information are the stakeholders who have their own areas of responsibilities and, therefore, their distinctive information needs. As a result, not all indicators are useful for everybody. Typical users are:

- intermediate bodies,
- project promoters,
- managing authorities,
- monitoring committees,
- European Commission,
- EU and national parliaments,
- external evaluators,
- wider public, including civic organizations.

In order to establish an indicator system, it is necessary to involve to the maximum possible the **future suppliers and potential users of information**.

The users should co-operate on a regular basis with the authority responsible for the design of the indicator system, for example, in the form of a temporary **working group**. Such a working group could be responsible for quality checks or further improvements.

The involvement of one or more outside **experts** may also be of benefit. Experience has also shown, especially for large programmes with many stakeholders, that it can be useful to fix procedures, definitions and other relevant information in an user manual.

The main **suppliers of information** on indicators for monitoring are the intermediate bodies or regional and local authorities who implement EFF Operational programmes in

the field. Their participation is likely to ensure that the system is realistically designed because they are familiar with practical possibilities and limits of data collection. They can be helpful in planning the channels for collecting information as well as proposing the initial quantification of indicators. The future management authorities should make sure that already existing information is used or reach a clear understanding with the users on what data not yet available could improve their management and decision making.

Other suppliers include the official statistical services. Their statistics may be used to define context indicators which describe a basic situation at the beginning of an intervention as well as to quantify baselines for other indicators.

7.1.5. Role of ex ante evaluation

Working Paper No 5864 of 8 May 2006 provides detailed guidance on the ex ante evaluation. As regards output, result and impact indicators and their targets, the working paper states that these should be proposed by the competent authorities. This should include an estimation of the likely impact in terms of adjustment rate of the fleet to the available resources. The evaluator should verify the appropriateness of the indicators identified and the proposed quantification, on the basis of past experience.

The establishment of impact indicators is a complex task which may not be possible for those responsible for drawing up the Operational programme. Some evaluation work on the part of the evaluators may be required as part of the ex ante evaluation if past experience does not provide a sufficient basis for establishing and quantifying impact indicators.

The evaluator should also verify the causality between outputs, results and impacts and make recommendations for improvements if appropriate.

Both the developers of the Operational programme and the evaluator should seek to ensure that the system of indicators remains manageable and useable. In this regard, the evaluator may need to work with the competent authorities on a detailed level of indicators which will not appear in the Operational Programme but which will be necessary for the Managing Authority and Implementing Bodies in delivering the programme.

The relevant working paper should be consulted for more detail on this issue.

7.2. Indicators to be included in Operational programmes

In preparing the Operational programme Member State must set out their specific objectives using quantitative or qualitative indicators. The list of indicators suggested by the EC at programme and priority axis levels is in the Annex I.

This section summarise the indicators and explanations which should be included in an Operational programmes. They should be used flexibly depending on the programme concerned and applying the principles of proportionality.

In addition, in line with the strategic importance which the Member State intends to attach to specific assistance measures, the strategy by priority axis and measure applied could be explained in detail with the use of additional indicators (optional).

Each indicator should be defined as follows:

Analysis of the fisheries sector

Context indicators

- name / definition
- baseline
- data source, frequency of reviewing

Indicators at Operational programme level: impact or result indicators

- name / definition
- baseline
- quantified target
- description of source or measurement method
- breakdown by sex and size of recipient undertakings, where appropriate

Indicators at priority axis level: result and impact indicators;²

- name / definition
- baseline
- quantified target
- description of measurement method or source
- breakdown by sex and size of recipient undertakings, where appropriate

Where appropriate:

- source of information
- periodicity
- measurement method

Description of implementation system

- description of responsibilities for data collection and analysis
- provisions for annual report: up-date of context and programme indicators

² Output indicators if necessary to complete information

- provisions for providing regular information on indicator values for Monitoring committee.
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7.3. Implementing Structural Interventions

During implementation of an EFF Operational programmes, the use of indicators requires consideration of a number of issues, including the reliability of data collection methods, how to usefully present the information to the monitoring committee and how to use it in an annual implementation reports.

7.3.1. Data collection

Data collection from the Operational programme will be the task of intermediate bodies, national, regional and local authorities and the Managing Authorities. Close co-operation with the users of information would improve the practical application of the indicator system in the implementation phase of an Operational programmes as well as rationalise data collection methods.

It will be the responsibility of the Managing Authority to check periodically the reliability of the information collected and to provide additional guidance, if needed.

7.3.2. Presenting the data to the Monitoring Committee

The monitoring committees are responsible for ensuring that EFF Operational programmes implementation is effective. Their tasks include reviewing progress, especially the degree to which the quantified targets associated with each of the priority axis have been achieved. Therefore, monitoring committees should be consulted on the indicator system during the Operational programme development phase as well as at an early stage of programme implementation in order to verify that the indicator system as a whole has been set up properly, and define what kind of information is needed for its own work.

The monitoring committee should concentrate on the strategic issues of a programme. This understanding should guide the decision of a managing authority on which data - financial, physical or process related - is presented to the Monitoring Committee. In most cases, it would probably consist of aggregated financial data as well as information on result and impact indicators.

The members of the monitoring committee have different knowledge and experiences regarding EFF programmes. In particular for complex EFF Operational programmes the use and interpretation of information provided by the indicator system might prove to be difficult. For these reasons, the managing authorities should when presenting data on indicators to the Monitoring Committee:

- Put quantitative information into its qualitative context,
- Reduce the volume of information provided,
- Present information in a standardised manner,
- Undertake some preliminary analysis, highlighting critical information, and
- Use appropriate presentation techniques.

7.3.3. Annual reports

The managing authority will submit an annual report to the European Commission within six months after the end of each full calendar year of implementation (for the first time in 2008). This report will detail the progress made in implementing the assistance over the preceding year. These reports must include, *inter-alia*, the following elements:

- data on the context in which the assistance was implemented;
- the financial implementation of the assistance.
- progress made in achieving the priorities, quantitatively using the adopted monitoring indicators.

As far as the physical indicators are concerned, the reports should use indicators at priority axis and Operational programme level. Values for impact indicators can be added when they become available.

The annual report is an opportunity to provide information not only to the Commission, but to other stakeholders too, including project promoters. Appropriate feed-back and publicity measures should be put in place.

The tasks illustrated above lead to an important conclusion:

The use and improvement of the set of indicators as part of the monitoring system is a continuous task during the programming period. The Commission underlines the need to establish and to develop the necessary administrative capacities, in particular within the managing authorities.

7.4. Synthesis

The following table summarises the role and function of indicators at the different stages of the programming life cycle. It can help to focus the attention of key stakeholders on the importance of indicators for effective design, implementation and evaluation of the Operational programmes.

Indicators in the Programming Life Cycle	
Stage of Programme Cycle	Issues for Indicators system
Operational programme Elaboration	<ul style="list-style-type: none"> • Socio-economic sector analysis.
Definition of Programme Strategy and Priorities.	<ul style="list-style-type: none"> • Definition of objectives at the Operational Programme and Priority axis level – establishment output, result and impact indicators
Planning Implementation Arrangements	<ul style="list-style-type: none"> • Designing the monitoring system: electronic data processing, quality check of indicators, • Designing the evaluation system: planning evaluation, with a description of indicator data needed to evaluate the Operational programme; selecting indicators, information on which should be delivered by an evaluation exercise • Establishing rules and conditions for a smooth and efficient co-operation between these two systems

Integration of Ex Ante Evaluation	<ul style="list-style-type: none"> • Ex ante evaluation as a parallel process to the Operational Programme design • Close co-operation between the evaluators and programme developers as regards the indicator system, monitoring and evaluation arrangements • Examination of the evaluation recommendations and their possible consideration in the design of the Operational programme
Implementation	<ul style="list-style-type: none"> • Collecting and updating information on indicators and transferring it to the users; • On-going process of improving the functioning of the monitoring system.
Annual Reporting on Implementation	<ul style="list-style-type: none"> • Preparation of the selected indicator data and their preliminary interpretation for the Annual Reports – possible linkage between the on-going evaluation exercise and annual reporting which could improve the decision making process
Preparing Information for the Monitoring Committee	<ul style="list-style-type: none"> • Compiling information on indicators and the progress achieved by the Operational programme towards the defined targets – delivery of data to the Monitoring Committee on a regular basis
Interim Evaluations	<ul style="list-style-type: none"> • Evaluation of the Operational programme performance as regards particular priority axis by using indicators as necessary • Review of indicators linked to a possible review of the programme strategy. • Review of functioning of the monitoring system (quality of indicators, data collection and their transfer to the users), if necessary
Ex Post Evaluation (Commission)	<ul style="list-style-type: none"> • Monitoring system delivering data on indicators (output and result indicators, if appropriate) for the purpose of the evaluation • Evaluation role in assessing impact (and results, if appropriate) achieved by the Operational programme – possible use of macro-economic models

7.5. Strategic environmental assessment

Strategic environmental assessment

Directive 2001/42/EC³ requires the Member States to carry out Strategic Environmental Assessments for a whole range of programmes. This strategic assessment will be carried out under the responsibility of the Member States. EFF operational programmes will be subject to this Directive. Article 5 of the Directive asks for an assessment of significant effects on the environment of implementing a plan or programme; article 10 stipulates a monitoring of plans and programmes. In developing indicator systems for EFF operational programmes Member States should take a decision if and how the monitoring as required under Directive 2001/42 and the monitoring system as such should be integrated or complement each other.

³ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of certain plans and programmes on the environment. OJ, 21.7.2001

ANNEX I

INDICATORS AND MONITORING ARRANGEMENTS FOR EFF OPERATIONAL PROGRAMMES

INDICATORS FOR THE OPERATIONAL PROGRAMME

The Operational programmes should include a number of indicators, reflecting the wide variety of interventions foreseen in the EFF Regulation. The Commission needs relate to a more limited number of indicators.

In conformity with the Annex I of the EFF Implementing Regulation, Member States should integrate into the Operational programme, result and impact indicators.

Impact indicators refer to the consequences of the Operational programme beyond the direct immediate effects. Result indicators relate to the direct and immediate effect on beneficiaries brought about by an Operational programme, mainly at priority axis level.

The indicators on the list hereafter should be seen as a guide, aiming to facilitate the monitoring and evaluation of the Operational programme at the level of the Managing authority and the Commission.

Member States are allowed to use the indicators of the list or other relevant indicators available in the Member State. The Operational programme should, however, contain a sufficient number of result and impact indicators, which measure the objectives to be met, the resources mobilised, an effect obtained etc.

INDICATORS AT OPERATIONAL PROGRAMME LEVEL (MAINLY impacts INDICATORS).

Indicator 1: Decreasing of fishing effort as regards the situation of the Community stocks.

Definition: Reduction of the size of the fishing fleet as a result of the tonnage and power exit from the fishing fleet and where relevant, equivalent of capacity concerned by temporary cessation of activities.

Source: Fishing vessels register of the Community

Indicator 2: Jobs created or maintained.

Definition: direct jobs created, full time equivalents, plus gender split broken down by main sector (fishing, aquaculture, processing)

Source: National statistics system and monitoring system

Indicator 3: Competitiveness (reduction of the production costs (%), increased productivity (%), economic viability (increased profit (%)) or other economic indicator where relevant statistical data are available.

Source: macro-economic models and monitoring system

COMMON INDICATORS AT PRIORITY AXIS LEVEL (MAINLY result INDICATORS)

1. Measures for the adaptation of the Community fishing fleet.

Reduction of fishing effort by fleet concerned by the fishing effort adjustment plans.

Reduction of capacity of the fishing fleet by a permanent cessation of fishing activities (GT and kW accounted)

Degree of modernisation of the fishing fleet.

Power of engines replaced and decrease of power related to (account Kw)

2. Aquaculture, inland fishing, processing and marketing of fisheries and aquaculture products.

Tonnage produced in aquaculture, processing and inland fisheries

Percentage of projects with environmental friendly production (reduction of negative impacts or enhancement of positive effects)

Increase of turnover (million €)

3. Measures of common interest

Protected marine area (square kilometres)

Increase of the fish products landed

Increase of the added value of the fish products processed and sold

Increase of consumption of fish products per inhabitant

4. Sustainable development of fisheries areas

Territory covered by the groups

Population in the territory covered by the groups and percentage depending of fisheries activities

Jobs created

5. Technical assistance

Improving administrative capacities and others

MONITORING OF THE OPERATIONAL PROGRAMME

Output indicators should become the main tool for the Member State for ensuring monitoring of the Operational programme. Whenever appropriate, these output indicators should be integrated into the monitoring system of the Operational programme.

The monitoring system set up by the Member State should provide, at least, information on the implementation of the priority axis and measures accordingly with the Annex III of the EFF Implementing Regulation.

The manner to organise information on operations that could be requested by the Commission accordingly with the Annex III of the EFF Implementing Regulation is close, as much as possible, to the current INFOSYS system already running for the FIFG Operational programmes. In doing that, for most of the EFF priorities and measures, Member States can use INFOSYS in the new programming period introducing minor changes.

The information gathered using the indicators should be up-dated in the forthcoming annual reports, preferably aggregated at the level of the Operational programme. If not stated otherwise, Member States should keep information available of the projects approved (planned outcomes) and systematically up-date this information when final data becomes available.