Monitoring and project evaluation as a principle of following efficiency of adopted measures

Monitorování a hodnocení projektů jako princip sledování efektivnosti přijatých opatření

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Abstract: The contribution supplies an outline of indicators, through which benefits from projects will be followed, that are prepared for usage in the LFA areas. It will be necessary to use the monitoring system for realisation of measures suggested on the base of the research project. The main task is to follow the efficiency of adopted measures for the individual environment sections, to evaluate efficiency of subsidies and finances from the EU funds. From the hitherto results, it is obvious on which measures are the prepared projects oriented at and by what indicators it will be possible to evaluate outputs, results and impacts of realised projects. The prepared system will enable feedback on decisions regarding efficiency of the realised measures in the monitored areas.

Key words: monitoring system, efficiency evaluation of measures, project realisation control, indicators, outputs, results, impacts, objectives, risks

Abstrakt: V článku je uveden přehled indikátorů, jejichž prostřednictvím budou sledovány přínosy z projektů, které jsou pro použití ve znevýhodněných oblastech připravovány. Pro realizaci opatření navrhovaných na základě výzkumného záměru bude nezbytné využít monitorovací systém. Půjde o sledování účinnosti přijatých opatření na jednotlivé složky životního prostředí, hodnocení účinnosti dotačních prostředků a prostředků z fondů EU. Z dosavadních výsledků je zřejmé, na jaká opatření se orientují připravované projekty a s jakými indikátory bude možné výstupy, výsledky a dopady realizovaných projektů hodnotit. Připravovaný systém umožní zpětnou vazbu na rozhodnutí o účelnosti realizovaných opatření ve sledovaných oblastech.

Klíčová slova: monitorovací systém, hodnocení účinnosti opatření, kontrola realizace projektů, indikátory, výstupy, výsledky, dopady, cíle, rizika

INTRODUCTION

In connection with solving of the research project MSM 122200002 focused on the appropriate ways of farming in sub-mountain and mountain areas and on creating harmony between their production and non-production utilisation, there was evaluated a possibility to use the monitoring and evaluation system applied in solving similar problems using the EU methodological principles of adopted measures efficiency evaluation.

The above stated process was influenced by the perspective, that it will be possible to use finances from the EU structural funds and initiatives for realisation of selected measures after the accession of the CR to the EU, where the use of monitoring and project evaluation including individual measures is a strict requirement of the efficiency evaluation of granted finances.

By realisation of proposed measures issuing from the above mentioned research project, it is possible to expect, from the use of the monitoring and evaluation system, recording and evaluation of measures leading to sustainable development, evaluation of environment risks, providing information for farming restructuring or for change and evaluation of technologies, eventually evaluation of the situation in usage of non-renewable resources.

METHODOLOGY

As it is prepared for these purposes, the monitoring system is the system including information, hardware and software means that are driven by exact rules to form a hierarchic system for management and decisions at all levels and in all periods of programme creation and of consequential projects.

It concerns management of structural aid, the task of which is to ensure maximal efficiency of realised pro-

The results have been obtainet by the research project MSM 122200002.

grammes to make possible impacts evaluation of this realisation in a line with targets set in the programme documentation, that is – in projects.

The base of monitoring system is at the level of individual projects and it makes possible to monitor a programme to all interested companies and institutions in the way of relevant data presentation at the level of priorities and measures even at the level of the whole programme. That is why such constructed system will not operate only at the project level, but it has to accomplish all information needs at higher levels of programme documentation, in other words, it has to be aggregated.

Monitoring system for management and results evaluation at preparation, realisation and evaluation of developing projects and programmes executes these basic functions:

– it creates a consistent and hierarchic system providing both detailed and aggregated information for all decision levels in all programme periods of individual programmes;
– it supports technologically checking of the data credibility at all levels of management (central, regional, local) in line with the process of administration decentralising;
– it supplies continual data collection and their updating according to the development of the programme and their projects in regular regime with periodical summarisation (monthly, quarterly, half-yearly and yearly);
– it prepares the monitoring system as a part of managerial system of structural help for the pre-accession period and for the period after the accession of the CR into the EU;
– it assures the control of realisation, gradual implementation and targets accomplishment through measures and projects.

MATERIAL

Monitoring – project monitoring goes along with the whole project life cycle from data collection, processing and data presentation to its realisation depending on the accepted programme.

Monitoring can be differentiated according to: projecting level, time and content, object of monitoring.

The structure of monitoring process goes in line with the process of programming documentation creation as far as the projecting level is concerned.

From the time viewpoint, the monitoring process can be differentiated according to *period, or phase* where the programme preparations and their individual projects can be found.

• *preparation phase – pre-realisation (ex ante)*

It concerns programme monitoring before the realisation starts, i.e. evaluation of expected benefits and impacts – economic, environmental and other.

In this phase, it is necessary to ascertain that the programme and the consequential projects are able to solve problems of the relevant region or sector. Planned programmes and their projects have to be secured from the viewpoint of the locality choice, realisation time, adequacy and finance allocation to the individual priorities and measures. The appointed indicators must reach the required quality.

• *ongoing phase – realisation (interim)*

It concerns monitoring of programmes and their individual projects during realisation.

In this phase, it is necessary to ascertain, that the programme realisation and its individual projects respect the appointed system of indicative indicators related to the individual programmes and projects realisation. The duty to fulfil the appointed indicators has to be grounded in finance agreements with investors, or in agreements about jointly-financed projects and in contracts made with suppliers (of services, goods, building operations and others).

The task of the ongoing realisation is to assess first results of the granted finance and their influence on the goal announced. It is provided by an independent evaluator who passes results on to the monitoring committee. This evaluation is updated continually so that it is possible to start the next action, realisation of next measures.

• *after-realisation phase – post-realisation (ex-post)*

The phase of consecutive evaluation is aimed at assessment of efficiency use and support. The base of evaluation is formed by effects and from them, conclusions for orientation of economic and social policy are derived. The expected result is the description of individual factors, how they contributed or failed to contribute to the success of realisation and to sustainability of the attained results. The ex-post evaluation must be finished at the latest 3 years after the termination of the monitored programming period (i.e. project realisation).

In this final period, it is necessary to ascertain that the programme was executed according to the time-plans and budgets and that the indicators stated in documentation, that had made the base for grant of finance subsidy to the programme and its project, were fulfilled. If it comes to any deviation its reasons must be stated.

According to the subject viewpoint, this separation is closely connected to the programmes goals, projects and adopted measures.

Construction of monitoring system comes out from the functions that the system should meet, i.e. especially:

– to evaluate subject and economic impacts of the adopted measures and deposited finance;
– to carry out control during the solution and fulfilment for appointed indicators, i.e. “gradual fulfilment of the target value” quantified in projects;
– to provide compatibility with the actual legislation of the CR and the EU;
– to submit evaluation results to appropriate institutions in the CR, eventually to the EU authorities where finances from the pre-accession aid of the EU were used;

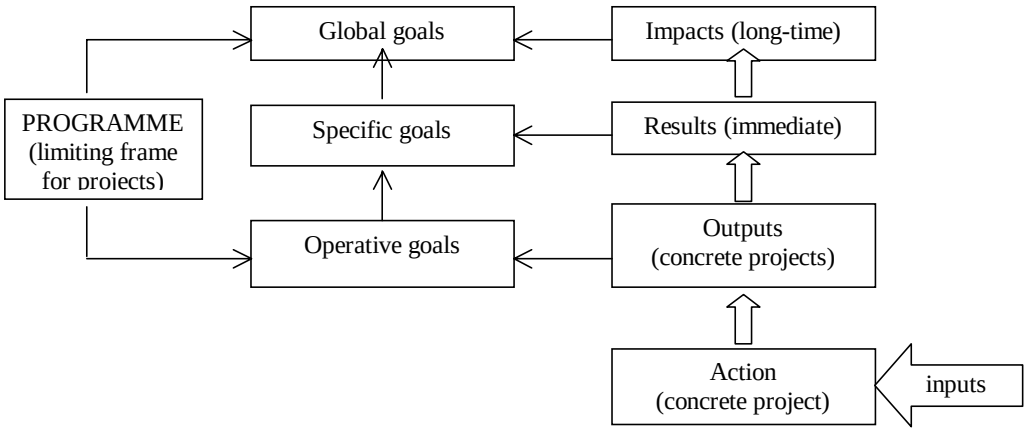

Figure 1. Relationships in the monitoring system in following the goals fulfilment

– to signal negative events of subject and finance feature and to provide feedback for the solution of these events.

Requirements for construction of monitoring system resulted from the following functions:
– to cover concrete projects according to priorities and measures authorised in the adopted programme, by monitoring,
– to set out the procedure of monitoring during project creation and realisation in a proper way of time,
– to choose information system covering the essence of the subjectively focused project, its goals, priorities and measures.

If the programme and project are to be structured in a right way and to be successful, the *system of indicators* has to be determined ahead.

Indicator is a pointer that has its input and output form and factual contect directed ahead and it accompanies a successful project evaluation from its start, during its realisation until its final assessment of planned goals efficiency. In other words – we have to find the appointed indicator in the same form and subject content during the whole time of the project existence.

It is necessary to have a *system of indicators* at disposal for the prepared project evaluation. This system should be connected to the EU support system and also to outputs, results and impacts from the characterised goals point of view. For this reason, we differentiate, with regard to the methodology of the European Commission, the following indicators:
– *output indicators*, that express the *operational goals*, i.e. concrete measures needed to achieve the planned goal (for example retraining schemes for the long-term unemployed); they are connected to activities. They are mainly measured in physical units (for example number of participants in re-qualification schemes). However, they can be formulated also in financial units (for example costs per 1 re-qualified worker),
– *results indicators*, that express the *specific goals*, i.e. what can be achieved by concrete partial measures (for example by improvement of the employment of long-term unemployed through re-qualification); they express direct and immediate effects, mostly short-time results of single measures; they provide information about the capacity and productivity of the final recipients. They can be of physical and financial character,
– *impacts-effects indicators*, that express the *global goals*, i.e. what should be the final effect of the development document (for example unemployment reduction, mainly by long-term unemployed, GDP growth and the like). There can be defined two kinds of effects according to their character: if it concerns effects shown after a certain time (specific effects), but which are directly connected with the realised activity, or if it concerns long-time effects that influence an appropriate area (global effects). Principles of these relations are shown in Figure 1.

DISCUSSION

The point of exploration in the frame of the above mentioned research project was to find out, among others, if it is possible to document in a clear way the effective and proper usage of finances both from domestic resources and from the EU resources from the level of (project) recipient up to the fund manager in the case of submitted projects.

Prepared projects in exploration areas are mainly oriented at:
– improvement of small and medium enterprise with competitiveness the support of jobs creation and equal opportunities for women,
– improvement of quality and enlargement of the traditional regional product assortment,
– improvement of regional markets structure,
– protection and care for environment with the use of agro-environmental projects,
– support of fishing development,
– support of measures for rural development concerning
  – building of infrastructure, especially road network for agriculture,

– improvement in municipal supplies,
– usage of secondary raw materials,
– usage of professional training and information potential, foundation of information centres, internet centres and the like.

It would be possible to follow for monitoring and evaluation of adopted measures (projects) for example:

• *at the level investments into agricultural firms and into small and medium enterprise development*

outputs:
– number of supported firms
– number of supported young farmers
– number of created places for stabled farm animals
– increase of stock capacity
– number, kind of performed activities

results:
– total capital volume
– subsidised capital volume per 1 job, hectare, big cattle unit

impacts:
– % of HDP per inhabitant growth
– development of employment in the monitored area
– created, or saved jobs, from it: for women
– income development

• *at the level of quality improvement and enlargement of agricultural products assortment*

outputs:
– number of cases concerning subsidised products
– number of supported firms

result:
– total capital volume

impacts:
– development of turnover in firms per worker
– volume of value added from regional products
– number of certified products
– number of new and saved jobs
– job creation for apprentices
– number of implemented management systems

• *at the level of transfer of scientific-technological knowledge, environment-friendly technologies and economical energetic technologies*

outputs:
– number of joint research projects for research institutes and firms
– realised environment-friendly technologies (capital volume, number of innovations users)

result:
– number of firms and research institutes taking part in co-operation incl. subjects applying new technologies

impacts:
– supply enlargement of local market by new products
– reduction of soil, water and other pollution in the region
– comparison of pollution before and after new technologies implementation (in per cent)

• *at the level of measures for rural development*

** infrastructure improvement*

output:
– number of supported cases

result:
– total capital volume, length of roads measured in km

impacts:
– better access to agricultural enterprises
– improvement of the connection of agricultural workplaces to the road network
– lower consumption of energy and time saving
– lower need of repairs concerning agricultural mechanisation
– increase of traffic safety by separating the traffic regarding agriculture production

** activities diversification, agro-tourism*

output:
– number of cases where the subsidy is provided (private, public)

results:
– total capital value for private and public activities
– housing capacity created event. updated

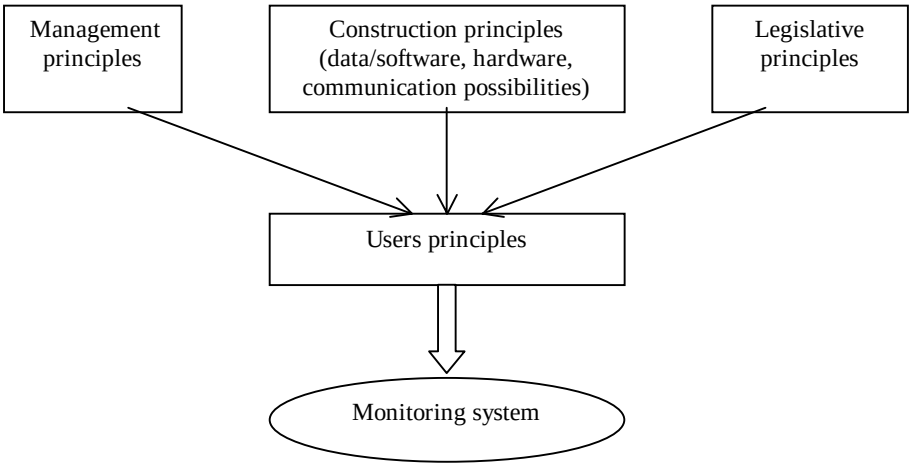

Figure 2. Principles necessary for construction of monitoring system

impacts:
– new jobs created, from that for women
– percentage of housing capacity and equipment utilisation in the region

** basic services for rural population*
output:
– number of new organisations providing services that were the subsidy recipients (number of supported projects)
result:
– range of investments in the supported service enterprises (in mil. CZK), increase of the number of users (in %)
impacts:
– number of inhabitants (in %) using services
– increase of employment and number of jobs in the region

** vocational training of farmers (training according to CR 1257/99)*
output:
– number of created training centres, number of trainers (according to project's intent)
result:
– increase of participants attending vocational training
impact:
– increase of proficiency concerning workers in agriculture (included into the projects)

It is clear from the above mentioned examples that the suggested monitoring system has to respect series of principles stated in Figure 2.

Monitoring system depending on the available data is exposed to series of risks that can limit its predicative ability and to distort in consequence values of the research effect in the end.

There can be named among the main difficulties the following:
– data are not available at appropriate geographical level,
– delayed publication of data (for example EUROSTAT data concerning per capita GDP are published with two or three years delay),
– there are gaps in official statistics with relation to projects requirements (for example separation between economically active full time and part time workers might not be stated),
– data are not structured enough as far as the subject view is concerned and they do not allow to assure inputs, outputs, results and impacts with sequence to project goals,
– methods and monitoring mechanisms for quantification event. for advanced estimates are not available,
– indicators structure does not allow their aggregation, i.e. their addition for results and impacts,
– functional connection between monitoring and evaluation is not defined sufficiently; founding of the monitoring system has to serve for finding out data that are not included in information systems, i.e. they have to be explored through sample survey, model solving etc.,
– it is not possible to link indicators for monitoring and evaluation with the criteria for project choice for assessment of demanded subsidies from structural funds justification.

CONCLUSION

From the described monitoring system, it can be expected, after its implementation, that it shall enable in the monitored areas, among other:
– following and evaluation of the impacts of the selected subjects farming in countryside on the individual environment elements
– evaluation of the direct and non-direct subsidies efficiency
– monitoring of the development of agriculture and rural space also in the social-demographic and economic sphere.

The prepared system should namely enable the feedback in the efficiency evaluation of utilised measures and to re-evaluate, based on these information, whether the proposed measures have brought the expected effect and will therefore be further applied.

REFFERENCES

Hrabánková M. (2000): Monitoring. 1. vydání. Praha, Institut výchovy a vzdělávání MZe ČR; ISBN 80-7105-210-8.

Hrabánková M. (1999): Strukturální fondy. 1. vydání. Praha, Institut výchovy a vzdělávání MZe ČR; ISBN 80-7105-182-9.

Hrabánková M. (1996): Kritéria pro hodnocení regionů ČR. In: Zemědělec, 2. 10., s. 5.

Hrabánková M., Vosejpková M. (2002): Regionální management. 1. vydání. České Budějovice, Jihočeská univerzita v Českých Budějovicích; ISBN 80-7040-564-3.

Rámec podpory Společenství – Operační programy (1998). MMs Praha. 98 s.

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