WORKING DOCUMENT

Approaches in using common Rural Development indicators in regional RDPs

Good Practice Workshop
"Specific challenges in using common RD indicators at regional level"
Rome, 6 and 7 March 2013

OUTLINE

1. INTRODUCTION

The Common Rural Development Indicators are used to develop RDP strategies and to monitor and evaluate the effects of rural development policy. The impact of this policy and its contribution to the CAP and EU objectives is assessed with impact indicators in the specific socio-economic and environmental context of the country or region.

In the current programming period (2007-2013) the RDP is analyzed with the set of objective and context related baseline indicators and the RDP effects are assessed with the seven common impact indicators. For the next programming period (2014-2020), the impact indicators are included in the set of context indicators which are used in conducting the SWOT analysis, needs assessment and developing the RDP strategy. Context and impact indicators will also be used in the later assessment of the RDP impacts and contributions to the CAP objectives and the Union strategy for smart, sustainable and inclusive growth. Baseline values are required at the starting point of the RDP implementation, and updated values will be required at later stages.

Data for most indicators (and their measurement units) is available from official EU statistical data sources such as Eurostat, FADN etc. at least at national level, whereas not always at lower territorial levels. This represents a specific challenge for Member States with regional RDPs as they will have to put in place adequate approaches to provide indicator values at the RDP level. Furthermore, enhancing the data availability at regional level is also an important concern for all Member States that aim to include regional specificities in their national RDPs.

This working document has been prepared for the Good Practice Workshop on "Specific challenges in using common RD indicators at regional level" which takes place in Rome on 6 and 7 March 2013. The document contains:

- The description of the methodological approach applied for preparing this Working Paper (Section 2),
- Main findings from the survey on potential approaches for bridging data gaps for RD indicators at the level of regional RDPs (Section 3),
- An overview table of identified data sources and approaches to overcome the data gaps at the regional RDP level (Annex 1).

2. METHODOLOGY

The objectives of this working document are: (a) to identify problematic indicators from the point of view of data availability, (b) to screen and inform on approaches to overcome existing data gaps. For this purpose first a screening on the availability of data for Rural Development indicators took place and then a survey has been conducted with Managing Authorities of RDPs in multi-regional Member States.

1. The **screening of data availability** was carried out for objective and context related baseline indicators of 2007-2013[1] and for Common Context Indicators (CCIs) of 2014-2020[2]. It led to the identification of problematic indicators for which values could not be extracted for their measurement units at RDP level (national and/or regional) from EU-data-sources (Eurostat, Rural Development Report 2012, etc.).

2. Based on this, a **survey** was sent to Managing Authorities of regional RDPs at the end of January 2013 in order to identify approaches employed to overcome data gaps in problematic indicators. Answers were received from 14 Rural Development Programmes, as shown in the table below. The findings obtained from the survey are presented in Annex 1.

Table 1 : Overview of replies to the survey on the availability of regional data for common RD indicators

Member State	Number of RDPs	Feedback received from
Italy	21	Sardegna Trento
Spain	17	Castilia y Leon Cataluna Extramadura Galicia Murcia Pays Vasco
Portugal	4	Continent Acores
Germany	14	Sachsen Anhalt Baden Württemberg Berlin Brandenburg
United Kingdom	4	-
Belgium	2	Flanders
Total	**62**	**14**

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[1] CMEF Handbook, Guidance note F
[2] Working document for the Evaluation Expert Committee: "Proposed list of Common Context indicators, December 2012.

3. MAIN FINDINGS

Findings of the screening of data availability shows that data gaps must be addressed in order to design SWOT, needs assessment and the Programme strategy, as well as to conduct the Ex ante evaluation. The survey has also provided some examples of data sources and approaches, which MAs of regional RDPs employ to overcome data gaps for problematic indicators. The results of the survey can be found in Annex 1 of this Working Document.

Based on the survey the following can be concluded:

- ✓ **The most common approach to bridge data gaps is to obtain data from regional and national statistical services.** In case of indicators and their measurements units which are problematic in obtaining values from the EU sources, Managing Authorities of RDPs use **national and/or regional statistical** services (statistical/sectorial yearbook) or databases of the national/regional Ministry of Agriculture.
- ✓ **Sectorial Reports are used as data source for food processing and forestry indicators.** For forestry indicators the **national forestry inventory** is often used as a source. This approach is found in Spain, Portugal and Germany, where the relevant Ministry releases the report periodically (e.g. every 10 years in the Spanish case) describing the state of the forestry sector at national and regional level. A similar approach was found for the indicators for food industry (e.g. Spain and Portugal), where data at regional and national level can be extracted from the **annual statistical reports** elaborated by the relevant Ministry.
- ✓ **Using information of the Paying Agencies.** For example, data for HNV farmland can be collected via application forms of direct payments once the HNV areas are defined in the system. This approach has been used in the RDP of Portugal Acores. The information on investments in renewable energy, including expected production, is used to fill the data gaps of the Common Context Indicator 31 in Flanders (BE).
- ✓ **Environmental Agencies are main data providers for environmental indicators.** Sources of national or regional **environmental agencies** or specialized departments such as Water management agencies, Nature conservation agencies are often used to provide data on environmental indicators. e.g. via **Geographic Information Systems** (GIS).
- ✓ **EC and European Parliament provide reports about the implementation of the Directive 91/676/CEE of the Council**, concerning the protection of waters against nitrate pollution which was used for the approximation of data for Objective related context indicator 21 and Common Context Indicator 38 in PT Continent.
- ✓ **The collaboration with non-governmental agencies, organizations and academy helps to obtain data.** Partnership and collaboration between governmental and **non-governmental agencies** is applied in order to acquire data for specific indicators. This approach is found in the Farmland Bird Index Indicator where RD authorities and non-governmental organizations such as Birdlife or ornithology society jointly collaborate to provide data for indicators at regional level. Other forms of collaboration are found also with Universities and research centers which offer their reports as sources of information and data as well.
- ✓ **Proxies are employed for certain indicators.** In some cases alternative measurement units - **proxies** are applied if data for the required measurement units cannot be found. The following tables show proxies described by MAs of regional RDPs:

Table 2: Proxies for common RD indicators extracted from survey (by programming period)

Programming period 2007-2013

No	Indicator	Measurement units	Potential Proxies	RDP
Objective related baseline indicator				
20	Water quality: Gross Nutrient Balance.	Surplus of Nitrogen in kg/ha Surplus of phosphorous kg/g	The amount of individual fertilizers (N and K) applied at the utilized agricultural area (kg/ha).	PT_Acores
21	Water quality pollution by nitrates and pesticides	Annual trends in concentration of nitrate in ground and surface waters	Average level of nitrate concentrates - % obtained from monitoring stations, considering the following classifications: < 25,25-50,>50mg NO3/L.	PT_Continente
24	Climate change: Production of renewable energy from agriculture and forestry	Production of renewable energy from agriculture	Share of renewable energy in gross power production (%) {Regional statistics}	DE_Sachsen Anhalt
			Hectares of different energy crops	BE_Flanders
			Production of renewable energy from biomass	ES_Galicia
25	Climate change: UAA devoted to renewable energy	UAA devoted to energy and biomass crops	Agriculture land covered with energy crops	DE_Baden Wuerttenberg
26	Climate change/air quality: gas emission from agriculture	Emission of greenhouse gases and ammonia from agriculture	Estimation of CO_2 emissions from main agricultural crops and exploitations based on the initiative "Less CO_2"	ES_Murcia
			Approximation based on emission from other industries branches	DE_Sachsen Anhalt
			Quantification of methane (CH_4) emissions from enteric fermentation, in small regions where the main agricultural activity is cattle production	PT_Acores
32	Internet take up in rural areas	% of population having subscribed to DSL internet	Approximation based on the number of households in rural areas with internet connection	ES_Murcia

No	Indicator	Measurement units	Potential Proxies	RDP
Context related baseline indicator				
9	Areas of extensive agriculture	% of UAA for extensive arable crops	Calculations based on the permanent pastures compared to the total crop area	ES_Murcia
			Using assumptions on labour intensity of extensive agriculture areas.	BE_Flanders
14	Water quality	% of the territory designated as nitrate vulnerable zones	Approximation based on gross nutrient balance	DE_Sachsen Anhalt
23	Internet infrastructure	DSL coverage	Calculation of the share of households with access to Internet	ES_Murcia

Programming period 2014-2020

No	Indicator	Measurement units	Potential Proxies	RDP
Common Context Indicator				
12	Agricultural productivity	Total factor productivity (TFP) compares total outputs relative to the total inputs used in term of volumes (index)	This indicator could be calculated with the following formula (unit in €): Agricultural Production + Subsidies - Intermediate inputs	ES_Extremadura
13	Labour productivity in agriculture	GVA / AWU (€)	Calculation based on GVA in primary sector and employment in primary sector.	BE_Flanders
37	Water abstraction in agriculture	Volume of water which is applied to soils for irrigation purposes (m3); (water abstraction for irrigation purposes as a % of the total gross abstraction could be added)	Total water consumption in agriculture	BE_Flanders
42	Biodiversity: protected forest	% FOWL protected to conserve biodiversity, landscapes and specific natural elements (MCPFE 4.9, classes 1.1, 1.2, 1.3 & 2)	Estimation of forest area that is within protected areas of the region, or in the Catalogue of Public Forests with protection purpose. Therefore, the forest area could be determined by crossing different maps in GIS. Using area of forest under forest stewardships	ES_Extremadura BE_Flanders

Source: Survey on the availability of regional data for common rural development indicators (Jan./Feb. 2013)

4. Annex 1: OVERVIEW TABLE – IDENTIFIED SOURCES AND APPROACHES

A) Objective related baseline indicators

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
11	Gross fixed capital formation in food industry	• Desegregation of data for food industry	Source: - National statistical service - Regional statistical service - Ministry of agriculture databases
13	Economic development in food industry	• Desegregation of data for food industry	Source: - National statistical service - Regional statistical service - Ministry of agriculture database - Statistical year book of the sector
15	Gross fixed capital formation in forestry	• Disaggregation of data for forestry	Source: - National statistical service - Regional statistical service - Ministry of agriculture database Approach: - Testing samples of the forestry companies
17	Biodiversity: population of farmland birds	• Not available	Source: - Regional statistical service - Data sources of Environmental agencies - Other governmental institutions, e.g. such as Regional Museum of Natural Sciences Approach: - Data of non-governmental agencies e.g. Birdlife, ornithology society, National Society for the Study of Birds etc., which calculate population of birds associated to agro areas
18	Biodiversity: High value farmland and forestry	• Not clear definition of the indicator • Areas not defined for HV forestry • Data only partially developed	Source: - Regional statistical service - Ministry of agriculture data sources - Government agencies on nature conservation and protection Approach: - NRN data collection - Data collection via application forms for direct payments of paying agencies
19	Biodiversity: Tree species composition	• Not available	Source: - Regional statistical service - National forestry inventory - Calculations based on data from a Statistical yearbook - Calculations based on data from Ministry of agriculture - European Environmental agency CORINE databases
20	Water quality: Gross Nutrient Balance.	• Disaggregation of national data	Source: - Research report of research centers, companies and universities which monitor the use of nitrogen in agriculture, - Ministry of agriculture data base Approach: - NRN data collection - Proxy: The amount of individual fertilizers (N and K) applied at the utilized agricultural area (kg/ha).applied at the utilized

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
			agricultural area (kg/ha).
21	Water quality: Pollution by nitrates and pesticides	• Data for ground waters and pesticides not available • Studies on individual parcels are available but do not conclusive results for RDP.	Source: - Regional environmental agencies databases - Regional statistical services Approach: - Ministry of agriculture reports on water quality and contamination by nitrates in underground and ground waters - Waste water and water management agencies data (Monitoring of water facilities , nitrates, pesticides according Directive 2000/60/EC) - Existing information from EC and European Parliament reports about the implementation of the Directive 91/676/CEE of the Counsel, concerning the protection of waters against pollution caused by nitrates from agricultural source. - Proxy (Nitrates): Average level of nitrate concentrates - % obtained from monitoring stations, considering the following classifications: < 25,25-50,>50mg NO3/L.
22	Areas at risk of soil erosion	• Not available	Source: - Calculations based on data for total soil loss by erosion
24	Climate change: Production of renewable energy from agriculture and forestry	• Not clear definition of the indicator • Data not available	Source: - Regional environmental agency data Approach: - Studies based on the experimental parcels and estimation of regional values based on these parcels - Estimations on the basis of certificates for green energy - Proxy: Share of renewable energy in gross power production (%) {Regional statistics} - Proxy: Estimations and own calculation based on hectares of different energy crops - Proxy: Production of renewable energy from biomass
25	Climate change: UAA devoted to renewable energy	• Data not available	Source: - Regional environmental agency data Approach: - Estimations of regional values based on national statistics - Using databases of areas receiving direct payments - Proxy: Agriculture land covered with energy crops
26	Climate change/air quality: gas emissions from agriculture	• Disaggregation of data by source of emission • Data for agriculture not available.	Source: - JRC reports - National inventory of GHG emissions. - Regional environmental agency data bases Approach: - Proxy: Estimation of CO_2 emissions from main agricultural crops and exploitations based on the initiative "Less CO2" - Proxy: Approximations based on the other industry branches - Proxy: quantification of methane (CH_4) emissions from enteric fermentation, in small regions where the main agricultural activity is cattle production.
28	Employment development in non-agriculture sector	• Data not available	Source: - National and regional data sources on employment disaggregated in Agriculture, livestock and fishing, industry, contraction and services, summing up employment in secondary and tertiary sectors (industry and services).
29	Economic development in non-agriculture sector	• Data not available	Source: - National and regional data sources on GVA , aggregation of

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
			values of secondary and tertiary sector (industry and services).
32	Internet take-up in rural areas	• Data not available	- Eurostat data, - Information sources from various press media. - Regional Internet Networks and Telecommunication Service Approach: - Proxy: Approximation based on the number of households in rural areas with internet connection
36	Development of local action groups	• Data not available	Source: - Regional statistic services - LAG registry - MTE results Approach: - Calculation of the population of LEADER territories in the region.

B) Context related baseline indicators

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
5	Forestry structure	• Data not available	Source: - National forest inventory - Regional forest agency reports and data
6	Forest productivity	• Data not available	Source: - National forest inventory - Regional forest agency reports and data
8	Less Favoured Areas	• Outdated Data	Source: - National statistical services - Regional statistical services - Regional forest agency reports and data - Geographic information systems Approach: - Aggregation areas at NUTS 2 level in each one of the Less Favoured Areas.
9	Areas of extensive agriculture	• Data not available	Approach: - Proxy: Using assumptions on labour intensity of extensive agriculture areas. - Proxy: Calculations based on the permanent pastures compared to the total crop area.
10	Natura 2000	• Data not available	Source: - Regional statistical services - Environmental agencies data sources - Red Europa reports, data sources - GIS database from National and regional agencies - Forest research institutes data sources Approach: - For forestry and agriculture areas: Intersection of maps from CORINE Land Cover, Natura 2000 delimitations and Local Administrative Units delimitations with agricultural census data.
11	Biodiversity: Protected forest	• Data not available	Source:

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
			- Regional statistical service and reports, - Forest research institutes data sources, - Environmental agencies data sources
12	Development of forest area	• Data not available	Source: - National Forest Inventory - GIS database from regional and national agencies
13	Forest ecosystem	• Data not available	Source: - National Forestry inventory - Regional forestry agency reports and databases - Red Europa database - INFC 2006 Approach: - Forest reports, surveys and research
14	Water quality	• Data not available	Source: - DG ENV data sources - Ministry of agriculture sources - Regional forestry agency reports and databases Approach: - Considering the areas marked s vulnerable for contamination with nitrates compared to total area. - Proxy: Approximation based on gross nutrient balance
16	Protective forests concerning primarily soil and water	• Data not available	Source: - Ministry of agriculture data sources on reforested areas with protective function - National Forest Inventory - National statistical services - Regional forestry agency reports and databases Approach: - Forestry surveys and research - Using GIS database - Estimations based on the National inventory soil erosion report and the criteria established in the Regional Forest Plan in determining the maximum admissible erosion (t / ha / year) which require greater forest protection to ensure the protection and quality of soil and water.
23	Internet infrastructure	• Not clear definition of the indicator • Desegregation of data by urban/rural	Source: - Regional Network and Telecommunication Service Approach: - Proxy: calculation of the share of households with the access to Internet

Common context indicator (including impact indicators) Programming period 2014-2020

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
CI 2	Structure of the Economy	• Disaggregation by sector and branch	Source: - National statistical sources - Regional statistical sources - Sectorial statistical yearbook. Approach: - Using calculations GVA forestry: GVA primary sector – GVA agriculture

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
CI 3	Employment	• Disaggregation by age	Source: - Sectorial statistical yearbook of the Ministry of Agriculture - National statistical service Approach: - Using data from municipality level
CI 10	Agricultural entrepreneurial income	• Not clear definition of the indicator • Disaggregate GVA by sectors • Data not available	Source: - Regional statistical service Approach: - Disaggregating national data - Using national statistics (e.g. wages/employees)and comparing them with FADN calculations for comparing standards of living of farmers to the rest of economy
CI 11	Agricultural factor income	• Not clear definition of the indicator	Source: - Regional statistical service Approach: - Disaggregating national data
CI 12	Agricultural productivity	• Not available • Methodology not clearly defined in the fiches	Source: - FADN Approach: - Proxy: (unit in €): Agricultural Production + Subsidies - Intermediate inputs
CI 13	Labour Productivity in agriculture	• Not available • Disaggregate GVA by sectors	Source: - Regional statistical services. - National statistics data Approach: - Disaggregating national data - Proxy: Calculation based on GVA in primary sector and employment in primary sector.
CI 25	LFA	• Not clear definition of the indicator • Disaggregation of data	Source: - Disaggregating national data - Summing up the areas at NUTS 2 in level in each one of the Less Favoured Areas.
CI 28	Labour productivity in food industry	• Not available	Source: - Sectorial statistical yearbook conducted by the Ministry of agriculture and environment. - Regional statistical services
CI 29	Labour productivity in forestry	• Not available	Source: - Regional statistical services
CI 30	Forest Area	• Not available	Source: - Statistical yearbook conducted by the Ministry of agriculture and environment - National Forest Inventory - Regional statistical services
CI 31	Production of renewable energy	• Not available	Source: - National statistical service Approach: - Estimation by requesting companies registered as special energy producer to report on the energy produced from both crops. - Agriculture: information derived from databank of the investment funds

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
CI 32	GHG Emissions from agriculture	• Not available	Source: - National inventory report by the relevant Ministry. - JRC reports and data Approach: - Disaggregating national data
CI 33	Farmland Bird Index	• Expected to be delivered	Source: - Regional statistical services Approach: - National Society for the Study of Birds monitoring funded by the National Rural Network.
CI 34	HNV	• Expected to be delivered	Source: - Regional statistical services Approach: - NRN data collection methodology - Regional environmental protection agency - Using various evaluation studies - Using data collected via applications for direct payments
CI 35	Conservation Status of species	• Expected to be delivered • No data available	Source: - Regional statistical services - Regional environmental protection agency data Approach: - Qualitative data from Red Natura fiches from Regional environmental authorities (data only available for Natura areas)
CI 36	Conservation Status of habitats	• Expected to be delivered	Source: - Regional statistical services - Regional environmental protection agency data Approach: - Qualitative data from Red Natura fiches from Regional environmental authorities (data only available for Natura areas)
CI37	Water abstraction in agriculture	• Not available	Approach: - Proxy: Total water consumption in agriculture
CI 38	Water quality	• Not available	Source: - Monitoring Reports developed by the water departments of the Ministry of agriculture and environment. - National Rural Network data collection methodology - EC and European parliament reports about the implementation of the Directive 91/676/CEE of the counsel, concerning the protection of waters against pollution caused by nitrates from agricultural sources.
CI 41	Natura 2000 areas	• Not available	Source: - Regional statistical services - Regional environmental protection agency data Approach: - For forestry and agriculture areas: Intersection of maps from CORINE Land Cover, Natura 2000 delimitations and Local Administrative Units delimitations with agricultural census data.
CI 42	Biodiversity: protected forest	• Not available • Not clearly defined • Disaggregation of national data	Source: - GIS database Approach: - Proxy: Estimation of forest area that is within protected areas of the region, or in the Catalogue of Public Forests with protection

No	INDICATOR	MAIN CHALLENGES	IDENTIFIED SOURCES AND APPROACHES
			purpose. Therefore, the forest area could be determined by crossing different maps in GIS. - Proxy: Using area of forest under forest stewardships
CI 43	Degree of rural poverty	• Disaggregation of data by rural	Approach: - Calculations based on data on income at municipal level (NUTS 4). (It is import to see, in how far the sparsely populated areas need to be delimited.)
CI 44	Rural GDP per capita	• Disaggregation of data by rural	Source: - National statistical service (GDP and population) - Regional statistical services Approach: - Possible calculation using the DEGURBA approach - Estimate for rural areas is based on information at NUTS III level. When the NUTS III area is not entirely rural, the % of the resident population living in rural LAU2 areas is calculated. If more than 50% of the resident population of the NUTS III area lives in rural LAU2, the area is considered rural at NUTS III.
CI 47	Distribution of territory by type of region	• Disaggregation of data by type of region	Source: - Local statistical services data bases Approach: - Approximation from statistics rural counties/urban districts
CI 48	Distribution of population by type of region	• Disaggregation of data by type of region	Source: - Local statistical services data bases Approach: - Approximation from statistics rural counties/urban districts
CI 49	Distribution of GVA by type of region	• Disaggregation of data by type of region	Source: - Local statistical services data bases Approach: - Approximation from statistics rural counties/urban districts
CI 50	Distribution of GVA by type of region	• Disaggregation by rural areas and age	Source: - National statistical services - Regional statistical services - Local statistical services data bases

Source: Survey on the availability of regional data for common rural development Indicators (Jan./Feb. 2013)