

ANNEX 4

EUROPEAN UNION RURAL INDICATORS

Table 1: Key Rural Development Indicators suggested in the PAIS report			
Theme	Issue	Indicator name	No.
Population and Migration	Demography	Population density	1
		% population aged 16 or under	2
		% population aged 65 or over	3
		Infant mortality rate	4
	Population change	Average annual population change	5
		Regional net migration balance	6
Social well-being	Service provision	Accessibility to public services	7 ¹
	Employment	% resident workforce working outside area	8
		Rural employment rate	9 ²
	Quality of employment	% low skilled and high skilled workers	10 ³
		% of part-time workers	11
		% of employees on short-term contract and long-term contracts	12
		% workforce self-employed	13
	Income	% of households in receipt of social payments	14
		Average earnings per capita	15
		Household disposable income	16
	Housing accessibility	No. of second homes	17
		Average house price deviation from national average	18
		Affordability gap ⁴	19
Rate of transactions (house sales)		20	
% turnover in rented sector		21	
Economic Structure & Performance (competitiveness)	Enterprise	Average no. of patents	22
		No. of patent applications	23
		R&D expenditure	24
		New business formation rate	25
		GVA per capita in manufacturing	26
		% GVA in high-technology sectors	27
	Human capital	No. of university students	28
		Share of workforce with higher qualification	29

Table 1: Key Rural Development Indicators suggested in the PAIS report			
Theme	Issue	Indicator name	No.
	Business infrastructure	Supply of broadband services	30
Economic Structure & Performance (diversification of rural economies)	Sectoral shares	Sectoral employment shares: high and low tech manufacturing	31
		Sectoral employment shares: shift share analysis	32
		% foreign owned companies	33
		% employment in foreign owned companies by sector (manufacturing and tradable services)	34
		Enterprise size structure by employee numbers	35
		Net revenue by enterprise sector	36
	Farm households	% share of pluriactive farm households	37
		% income from non-farming activities	38
		% income from off-farm activities	39
	Tourism & recreation	No. of bedspaces per 1,000 inhabitants	40
		No. employed in rural tourism accommodation providers	41
		Accommodation occupancy rate	42
		Share of rural enterprises in total tourism turnover	43
	Economic Structure & Performance (Addressing the primary sector)	Agriculture	Farm size distribution (area/output)
Total gross output			45
Gross value added			46
Farm net value added per holding, hectare and AWU ⁵			47
Farm business employment			48
Forestry		Employment (permanent/temporary)	49
		% area forested (on-farm/off-farm)	50
		Total gross output	50
		Total value added	51
		Value of total annual gross fellings	52
Fisheries, aquaculture & fish processing		Total gross output	53
		Total value added (% of GDP)	54
		Employment by home port	55
		Value of landings (by local registered boats)	56
		CFP Dependency Indicator ⁶	57

Table 2
Indicators suggested in the Hay report

1. Demographic characteristics and changes

ISSUES	INDICATORS	VARIABLES
Population change	Average population	Population year 1, population year 2
Population density	Population density	Population year 1, area (square km)
Age structure	Elderly and young population	% of 55+ to total population % of age group 14 and under to total population % of age group 14 and under to age group 55+
Migration	Age specific migration	Interregional migration
Natural population change	Birth/death ratio and % change	Total deaths year 1, total deaths year 2 Total births year 1, total births year 2

2. Employment and human capital

ISSUES	INDICATORS	VARIABLES
Human capital	Education levels	% Population aged 25-59 having attained only secondary education or less
Change in employment	Employment growth	Total employment by age and sex year 1 Total employment by age and sex year 2
Employment and economic activity	Employment rate Unemployment level Activity rate	Employed persons aged 15-64/working age population Unemployment rate – total population Active population working population
Opportunities for women	Employment rate by gender	Employed females aged 15-64/working age population – national level Employed males aged 15-64/working age population – national Employed females aged 15-64/working age population – regional Employed males aged 15-64/working age population – regional

3. Welfare, income and quality of life

ISSUE	INDICATOR	VARIABLES
Economic prosperity	Average income and growth/decline	GDP per capita year 1, GDP per capita year 1, GDP per capita year 2
Quality of work opportunities	Proportion of employment part-time or seasonal	% of part-time employment as % of total employment % of seasonal employed as % of total employment
Access to services	Proximity to hospital, school, postal services, bank	
Deprivation	Jobless households Dependence upon state aid	Share of households in which no member is in employment Poverty rate before social transfers (original income) Poverty rate after social transfers (total income) % Income from social transfers
Health	Life expectancy at birth	Life expectancy of females at birth Life expectancy of males at birth

4. Agricultural adjustment and structural change

ISSUES	INDICATORS	VARIABLES
Changing agricultural employment	Agricultural labour force and change	Total agricultural labour force in AWU year 1 Total agricultural labour force in AWU year 2
	Changing intensity	Average number of AWU by holding/total holdings Average number of AWU by 100ha/total holdings Number of AWU/Total UAA Yr 1, year 2
	Family labour	Total family labour force in AWU/ Total labour force in AWU
Pluriactivity	Holders with other gainful activities	Holder's being a natural person: work time>0to<25% - persons Holder's being a natural person: work time>25to<50% - persons Holder's being a natural person: work time>50to<75% - persons - as a % of - Holder's being a natural person: sex = female (persons) Holder's being a natural person: sex = male (persons)
Ageing of farmers	Proportion of older holders and change	Holder's being a natural person 55-64 years AWU year 1, year 2 Holder's being a natural person 65+ AWU, year 1, year 2/ Holder's being a natural person AWU
Agricultural viability	Income from agriculture and % change	Average standard gross margin per hectare
Structure of agricultural holdings	Farm size (business size)	Total UAA/ Total agricultural area
	Farm Size (Area)	Total standard gross margin (ESU)/ Total number of holdings
	Intensity	% of agricultural area as irrigated area Standard gross margin per annual work unit SGM per UAA
	Importance of livestock	ESUs from livestock

5. Multifunctionality of agriculture

ISSUES	INDICATORS	VARIABLES
Uptake of agricultural policy	Farms with agri-environment schemes	% of holdings in area with agri-environmental scheme
	Farms in designated areas	% holdings in area covered by designated area status
Importance of forestry	% of farms with forests	Number of holdings with woodland/ Total number of holdings
Farms with pluriactivity	Holders with other gainful activities	Holder's being a natural person: work time>0to<25% - persons Holder's being a natural person: work time>25to<50% - persons Holder's being a natural person: work time>50to<75% - persons - as % of - Holder's being a natural person: sex = female - persons Holder's being a natural person: sex = male - persons
Uptake of organic farming	% of organic farms In region	Total number of holdings/ Number of organic farms

6. Rural economic diversification

ISSUES	INDICATORS	VARIABLES
Dominance of primary sector activities?	Relative importance of primary sector	Total employment in primary sector/total employment
Development of new activities	Employment in manufacturing etc	Total employment in secondary sector/total employment
	Employment in business etc	Total employment in tertiary sector/total employment
	Value added locally	% of labour force in food processing
	Accommodation capacity and change	Number of tourist beds in region
		% Employed in restaurants and hotels Year 1, % Employed in restaurants and hotels Year 2
Dependence on public sector employment	Strength of the public sector	% Employed in public sector

7. Innovation and enterprise

ISSUES	INDICATORS	VARIABLES
Innovation and research	Patent applications	Total international patent applications per inhabitant
	Research and development expenditure	% GDP spent on research and development – government sector % GDP spent on research and development – business sector % GDP spent on research and development – higher education sector
New enterprise	Investment and creation of new business	Gross fixed capital formation by the private sector as % of GDP Gross business start-ups
Importance of telecommunications	ICT Expenditure	Information & communications technology expenditure/GDP
	Citizens with Internet access at home	% of citizens with Internet access Total population

8. Policy⁷

ISSUES	INDICATORS	VARIABLES
Region eligible for EU aid	Presence of objective 1 or 2 in region	
Importance of rural development regulation	Uptake of rural development regulation	EU spending on agricultural support - the 'Rural development regulation' National spending on agricultural support Number of approved RDR approved applications in region Amount of money awarded to region for uptake of the RDR Amount allocated to Article 33 (Non-agricultural measures)
Region eligible for LEADER funding	Use of LEADER II and LEADER +	EU spending on LEADER II and LEADER+ National spending on LEADER II and LEADER+ Presence of 1 or more LEADER local action groups within territory
Mountain areas & less favoured areas	Proportion of area covered by mountain and less favoured area status	% of area covered by less favoured area status % of area classified as mountainous
Farmers leaving agriculture prematurely	Farmer retirement scheme	% uptake of farmer retirement scheme
Dependency of Farm-Payments	CAP support	CAP support/total SGM

9. Rural environment and landscapes

ISSUES	INDICATORS	VARIABLES
Type and scale of farming	Average farm size (area) Main farm type	Total standard gross margin (ESU)/ Total number of holdings (See farm type classification in farm structure survey)
Levels of exploitation of natural resources	% of farm with forest	Number of holdings with woodland/ Total number of holdings
Landscape and biodiversity	Environmental designations	% of area covered by special protection status % of area covered by EC Birds directive % of area covered by EC Natural habitats directive

10. Infrastructure and peripherality

ISSUES	INDICATORS	VARIABLES
Peripherality	Peripherality index Road quality Rail transport Existence of airport in region Distance to airport from centre point of region	Presence of motorway link to nearest large town Presence of rail link to nearest large town Presence of international airport in region Presence of airport serving national destinations in region

⁷ The main policy areas would include: Structural and Cohesion Policy, The Rural Development Regulation, LEADER +, and Mountain and Less-Favoured Areas.

Table 3
Specification of Eurostat indicators (as laid down in an ESTAT discussion document)

1. Demographic data

Level of geographic detail: NUTS 5

ISSUE	INDICATOR	VARIABLE
Population change	Average total population (this is for a first screening, if there is a change, one should go deeper)	Population year 1 Population year 2
Migration	Age specific migration (active out and in movement has reasons Who migrates and why?)	Immigration Outmigration Across NUTS 5 borders
Natural population change	Birth/death ratio and % change (reflects also the age structure and social well-being)	Total births year 1 Total births year 2 Total deaths year 1 Total deaths year 2
Population density change	Population density year 1 Population density year 2 (pressure on open space?)	Population year Area in km ²
Age structure changes	Age structure year 1 Age structure year 2 (report e.g. ageing of the population. The ratio 5 – 14 and 55 -64 builds the indicator “demographic labour pressure”)	Minimum 5 – 14 years and 55 – 64 and 65 and older
		Number of households

2. Employment and economic data

Level of geographic detail:

ISSUE	INDICATOR	VARIABLE
Forms of employment	Percentage of self-employed persons (this rate is higher where small and medium-sized businesses exist; generally the rate is also higher in rural areas due to farmers etc.)	Number of self-employed persons
Importance of different sectors	Employment in primary, secondary and tertiary sector (is the area shaped by agricultural activities; is there a change to the tertiary sector visible already)	Average total employment in primary/secondary/tertiary sector (By NACE subsection at the work place)
Importance of public sector	Percentage of employment in public sector	Employment in public sector Total employment
Human capital	Educational level of employees / self-employed people (Is the workforce well educated?)	Number of people with higher education (According to the International Standard Classification of Education , ISCED)

Change in employment	Employment growth	Total employment year 1 Total employment year 2 (By age and gender)
Relative changes of employment	Employment rate year 1 Employment rate year 2 (incl. part-time employment and seasonal employment)	Employed persons aged 15-64 (By gender)
Relative changes of unemployment	Unemployment rate year 1; Unemployment rate year 2	Unemployed persons aged 15-64 (By age and gender)
Potentially available human resources	Activity rate year 1 Activity rate year 2	Active population / working population
Importance of commuting	Change in commuter figures (might give information on the function of the region)	Number of commuters (Number of people crossing NUTS5 borders regularly)
Dynamic of the local economy	Business formation rate (is the area attractive for start-ups? Are incentives given for new businesses?)	Total number of businesses Number of new businesses
Importance of tourism	Importance of tourism (covers both agri-tourism and conventional tourism)	Number of tourist beds Number of over night stays

3. Infrastructure data

Level of geographic detail:

ISSUE	INDICATOR	VARIABLE
Accessibility of the region	Road network, railway, airport (accessibility of the region; in certain regions of Europe the railway network becomes smaller, e.g. certain connections are closed)	Distance in km to next motorway or similar road Distance to next railway station distance to next airport (From gravity points? Or time to be spend to reach sth.)
Development of transport infrastructure	Investments in transport network last 5 years	EU and national subsidies spent in millions of Euros
Access to services	Proximity to services (banks, post, shops, restaurants, schools, doctors, hospitals, pharmacy etc.) (attractiveness of the region)	Presence and distance to them
Availability of telecommunications	Internet access, mobile phone cover (these are basic parameters for new businesses)	Number of households /businesses with internet access number of registered mobile phones
Potential for new business formation	Availability of land for industry and other businesses	Area of industrial estates in ha

4. Welfare data

Level of geographic detail:

ISSUE	INDICATOR	VARIABLE
Deprivation	Dependence upon social aid (difficult variable because the threshold to receive social aid varies between member states)	Number of people receiving social aid
Quality of life?	Percentage of people living in self-owned property	Total number of people living in own property Total number of people
	Poverty rates	

5. Agriculture and structural change

Level of geographic detail:

ISSUE	INDICATOR	VARIABLE
	Structure of Agricultural Holdings	
	Total number of holdings	
	Average age of owners of holdings	
	Farm Size (area),	Average AWU per holding
	Intensity	% of area irrigated % of area under ecological farming LSUs per ha
	Main farm type	According to the classification of the FSS
	Importance of family labour	
	Percentage of part-time farmers	
Pluriactivity		Holders with other gainful activities
Importance of Forestry	Percentage of farms with forests	Total number of farms Number of farms with forest

Table 4
EU questionnaire on which common indicators for monitoring rural development programming are constructed

Common cross-cutting evaluation questions
(related to the individual chapters of the Council regulation)

1. To what extent has the assistance influenced the population level, composition and distribution in rural areas?
2. To what extent has the assistance been conducive to securing employment?
3. To what extent has the assistance been conducive to provide an appropriate level of income to the rural community?
4. To what extent has the market situation been improved through the assistance especially from redeploing production, improving quality and competitiveness?
5. To what extent have environmental concerns been integrated into rural development programming so as to improve the environmental aspects of activities in rural areas, including agricultural practices?
6. To what extent have programming and implementation helped in producing the anticipated impacts?

Common chapter-specific evaluation questions
(related to the individual chapters I to IX of the Council regulation)

Chapter I - Investments in agricultural holdings

- I.1.- To what extent have the investments improved the income of those farmers receiving them?
- I.2.- To what extent have the investments contributed to the improvement of efficiency on holdings?
- I.3.- To what extent have the investments contributed to the reorientation of farming through the redeployment of production and the diversification of activities?
- I.4.- To what extent have the investments improved the quality of farm products?
- I.5.- To what extent has the diversification of on-farm activities originating from the investments helped maintain employment?
- I.6.- How significant are the impacts of the investments on the rural environment?
- I.7.- To what extent have the investments improved the quality of the production process, notably by improving working conditions, animal welfare and hygiene?

Chapter II - Setting up of young farmers

- II.1.- To what extent has the “setting up” aid covered the costs arising from setting up?
- II.2.- To what extent has the “setting up” aid contributed to the earlier transfer of holdings?
- II.3.- To what extent has the aid influenced the number of young farmers of either sex to set up?
- II.4.- To what extent has the setting up of young farmers actually achieved new employment or safeguarded existing employment?
- II.5.- How significant was the synergy with the aid for early retirement in achieving earlier transfer? (cf., question IV.4)

Chapter III - Training

- III.1.- To what extent has vocational training of individuals of either sex assisted in achieving efficient and competitive structures?
- III.2.- To what extent has the improved level of training contributed to increased employment and the enhancement of job quality?
- III.3.- To what extent has vocational training promoted environmentally sustainable management and practice in agriculture and forestry?
- III.4.- To what extent has vocational training enabled farmers to conform to standards of hygiene and animal health in the field?
- III.5.- To what extent has vocational training been conducive to the uptake of rural development activities?

Chapter IV - Early retirement

- IV.1.- To what extent has the aid for early retirement contributed to the earlier transfer of farms and the rejuvenation of the agricultural population?
- IV.2.- Was the income offered to individuals with a holding to transfer and to farm workers appropriate in terms of offering them a fair standard of living and making them abandon farming?
- IV.3.- To what extent has the reassignment of released land to non-agricultural activities contributed to the quality of the environment and the preservation of the landscape?
- IV.4.- To what extent has the aid for early retirement in conjunction with the aid for setting up of young farmers contributed to the improvement of agricultural structures? (cf. question II.5)

Chapter V - Less favoured areas and areas with environmental restrictions

- V.1.- To what extent have the allowances contributed to farm income?
- V.2.- To what extent have the allowances helped in ensuring a continuation of the agricultural land use?
- V.3.- To what extent have the allowances in less favoured areas helped in maintaining the farming population?
- V.4.- To what extent have the allowances contributed to the protection of the environment?
- V.5.- To what extent has differentiation of the allowances with respect to specific natural handicaps and environmental problems and according to the regional, sectoral and structural situation, improved the effectiveness and efficiency of the assistance?

Chapter VI - Agri-environment

- VI.1.- Biodiversity (habitats and damage to them from farm pollution)
- VI.2.- Rural landscapes (biophysical features, appearance of habitats and agricultural ecosystem, cultural & historical features)
- VI.3.- Natural resources (soil, water).

Chapter VII - Improving the processing and marketing of agricultural products

- VII.1.- To what extent have the investments helped increase the competitiveness and value added of agricultural products?
- VII.2.- To what extent have the producers of basic agricultural products benefited from the investments?
- VII.3.- To what extent have the investments improved human health conditions thanks to the higher quality of the products and the improvement in working conditions?
- VII.4.- How significant are the impacts of the investments on the environment and natural resources?

Chapter VIII - Forestry

- VIII.1.- To what extent would forest resources be improved or safeguarded in the short, medium or long term due to the aid?
- VIII.2.- To what extent has the economic function of forests been improved in a sustainable manner?
- VIII.3.- To what extent have the forestry measures contributed to other socio-economic or social functions?

VIII.4.- To what extent has biological diversity been preserved or improved?

VIII.5.- To what extent have the protective functions of forests been better ensured?

VIII.6.- How significant is the anticipated stocking of carbon dioxide due to reforestation and forest improvement on a time scale relevant to international protocols?

Chapter IX - Promoting the adaptation and development of rural areas

IX.1.- Have the actions, specifically those undertaken to improve the living conditions in rural areas, contributed to the maintenance of the population in rural areas?

IX.2.- To what extent has diversification of activities originating from the assistance contributed to the maintenance or creation of employment in rural areas?

IX.3.- To what extent have the actions contributed to the maintenance or improvement of the income of the rural population?

IX.4.- How significant has the assistance been to the improvement of the rural environment?

References

European Commission (EC) (2002). “Guidelines for the mid term evaluation of rural development programmes 2000-2006, supported from the European Agricultural Guidance and Guarantee Fund”. Working Document VI/43512/02 FINAL: 26.2.2002: DOC. STAR VI/43517/02.
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