

Description of the socio-economic data collection methodology of the fish processing sector in Bulgaria Census

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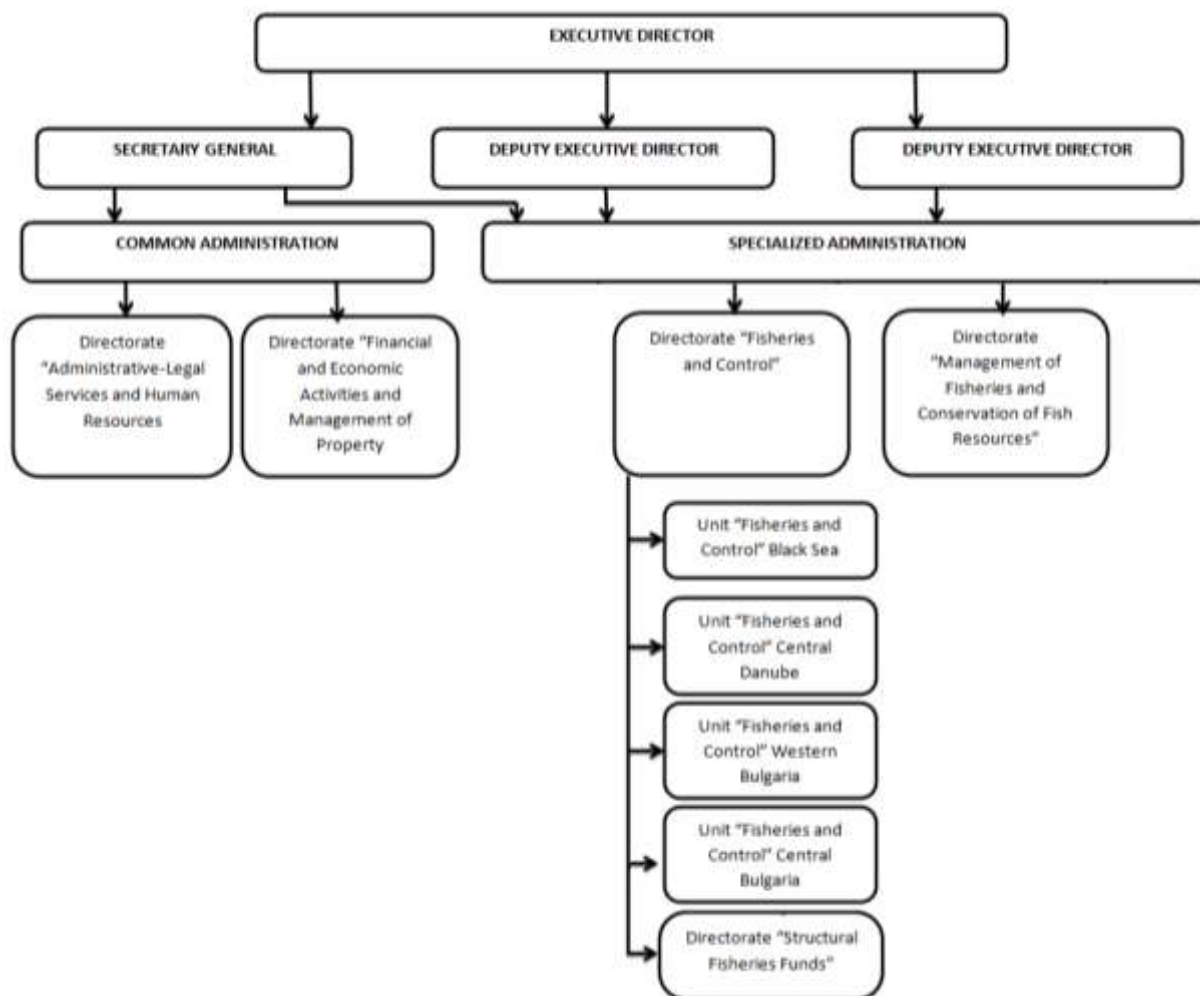
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1. General information about Executive agency for fisheries and aquaculture as responsible authority for fisheries control and data collection.

The responsible authority for fisheries control in Bulgaria is the Executive Agency for Fisheries and Aquacultures (EAFA). The Agency is organized by General administration (Accounting office, Human resources and Legal Services) and Specialized administration (Fisheries control, Structural Fisheries Funds and Management and monitoring of fish resources. The activities related to the fisheries and aquaculture control are carried out by Directorate “Fisheries and Control” which is divided by several units on geographical basis as follows:

- Unit “Fisheries and control – Black Sea”. This unit is responsible for fisheries and control in the Black Sea waters, inland fishing activities, aquaculture and market, collection, initial verification, registration of the questionnaires for socio-economic statistics for the fleet, aquaculture and processing enterprises and uploading of the scanned document in EAFA’s information system. - unit “Fisheries and control – Black Sea” it is composed by 3 sections:
 - o Sector “Fisheries and Control Burgas” – responsible for inspection and control activities in Black Sea, inland waters, aquaculture farms, marketing, transportation of fisheries products and collection of the questionnaires for socio-economic statistics in the area of Burgas region;
 - o Sector “Fisheries and Control Varna” – responsible for inspection and control activities in Black Sea, inland waters, aquaculture farms, marketing, transportation of fisheries products and collection of the questionnaires for socio-economic statistics in the area of Varna region;
 - o Sector “Fisheries and Control Dobrich” – responsible for inspection and control activities in Black Sea, inland waters, aquaculture farms, marketing and transportation of fisheries products transportation and collection of the questionnaires for socio-economic statistics in the area of Dobrich region;
- Unit “Fishing Monitoring Centre” – responsible for monitoring and surveillance of fishing vessels.
- Unit “Fisheries and Control – Western Bulgaria” – it is located in Sofia and it is responsible for inspection and control activities in Danube and inland waters, aquaculture farms, marketing and transportation of fisheries products and collection of the questionnaires for socio-economic statistics in the area of regions of Sofia, Pernik, Kyustendil, Blagoevgrad, Vratsa, Montana and Vidin.
- Unit “Fisheries and Control – South Bulgaria” – it is located in Plovdiv and it is responsible for inspection and control activities in inland waters, aquaculture farms, marketing and transportation of fisheries products and collection of the questionnaires for socio-economic statistics in the area of regions of Plovdiv, Pazardjik, Smolyan, Kardjali, Haskovo, Sara Zagora, Sliven and Yambol;
- Unit “Central Danube” – it is located in Ruse and it is responsible for inspection and control activities in Danube and inland waters, aquaculture farms, marketing and transportation of fisheries products and collection of the questionnaires for socio-economic statistics in the area of regions of Pleven, Lovech, Gabrovo, Veliko Tarnovo, Ruse, Silistra, Targovishte, Shumen and Razgrad.

The Agency’s organization chart is presented below.



2. Description of the data collection scheme and sampling method for economic and social variables for the processing enterprises

Registration and control of processing plants are carried out by the Bulgarian Food Safety Agency (BFSA). In the beginning of each year an expert from EAFA, which is responsible for the data collection from fish processing enterprises is downloading the list of active processing plants from the official online registers available in the webpage of the BFSA. In regards to the Data Collection Framework, the Bulgarian legislation was adapted in order to collect socio-economic variables from EU MAP, and in 2016 the Fisheries and aquaculture Act was amended. As a responsible institution for the Data collection, EAFA was provided with the rights to collect data for the fish processing sector. The annual questionnaire for processing enterprises consists of 2 parts – in the first part the owner should fill his name, phone number, name of the enterprise, in the second part of the questionnaire the owner /or his representative/ should fill the economic and social variables from Table 10 from the Commission delegated decision (EU) 2019/910. The collection of all variables is compliant with relevant PGECON/RCG ECON recommendations.

2.1 Type of data collection scheme.

The data collection scheme for the processing enterprises in Bulgaria is **Census and the sampling unit is a fish processing plant**. Based on national legislation (Art. 27a from Fisheries and Aquaculture Act), every owner of processing plant which is in the register in the BFSA, or his representative, is required at the beginning of each year (before January 31) to submit economic and social information for the previous year. The sampling method that we are using is to collect questionnaires for all the enterprises with an active registration during the reference year.

2.2 Update the questionnaire to comply with the latest legislation and the needs of the data collection program in Bulgaria.

Every year the Executive Director of EAFA affirms the content and the type of questionnaire, which is prepared by the relevant data collection experts. The questionnaire is completed manually or electronically by the owner of the enterprise or his representative /like accountant/ and is accepted by an employee (someone from the administration) of the agency who is trained for this and is aware of the meaning of economic and social indicators. If necessary, the employee explains some of the variables. The filling of the questionnaire is completed after the owner and the employee of EAFA put their signatures and the questionnaire is entered in the electronic record-keeping system of the Agency.

2.3 Data validation procedure

The first quality checks of the questionnaire are made by the employee of EAFA who receives the questionnaire – this initial check is focused mainly on the amount of data filled in. The second check is done by the person who submits the data from the questionnaire in the database of EAFA. If at this stage of the processing of the questionnaire are detect any inconsistencies or value that is not logical, based on parameters of the enterprise, number of employees, reported production and sales or any other parameter, an employee of the agency contacts the owner of the enterprise and if he is not able to provide a logical explanation, he is obliged to come and edit the value.

2.4 Estimation procedures

Estimation procedures were made only for the previous years, in which the questionnaire was not mandatory and there was missing information. Since now the collection of questionnaires is from all processing plants, no estimation is needed, because they are required to submit all the data. If for some reason after 31st of January some of the owners had not reported data for the previous year, an employee of the agency contacts the owner and reminds him of this obligation. In addition, administrative sanction can be imposed to the owner for not fulfilling obligations to report socio-economic information.

3. Methodology used for collection of the variables

In order to improve the collection, quality and comparability of the different variables among MS the guidelines on socio-economic variables contain definitions and methodology for the variables requested under the EU MAP from 2022 are used. The guidelines are prepared by the experts from all MS in the regional coordination group on the economic issues (RCG ECON, former PGECON) and they are living documents. Moreover, the definitions for the variables agreed by all MS with the issuing of the Economic Issues Regional Work Plan for data collection in the fisheries, aquaculture and fish processing sectors 2025-2027 under RCG ECON is also implemented.

Following the Guidance Document for the Fish Processing (Page 120-135 of the RCG ECON 2023 Report) – http://dcf-bulgaria.bg/wp-content/uploads/2024/10/2023_RCG-ECON_TM-report_final.pdf, Social data - http://dcf-bulgaria.bg/wp-content/uploads/2021/10/EUMAP_guidance_SOCIAL.pdf, and ECON_RWP_2025-2027 - http://dcf-bulgaria.bg/wp-content/uploads/2024/10/ECON_RWP_2025-2027.pdf, the variables are collected as follow:

VARIABLE GROUP	Variable	Definition	PGECON advice	ISSG fish processing suggestion	Methodology used
INCOME	Turnover	<p>Turnover comprises the totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties.</p> <p>Turnover includes all duties and taxes on the goods or services invoiced by the unit with the exception of the VAT invoiced by the unit vis-à-vis its customer and other similar deductible taxes directly linked to turnover.</p> <p>It also includes all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice. Reduction in prices, rebates and discounts as well as the value of returned packing must be deducted.</p> <p>For the segments with “main” fish processing activities, “Turnover” variable, should include only Turnover related to the principal fish processing activity. = DCF Turnover</p>		Turnover for main and nonmain activity enterprises should be transmitted separately. Turnover from activities other than fish processing should be allocated to "other income"	<p>Directly obtained from DCF survey</p> <p>For the segments with “main” fish processing activities, “Turnover” variable, should include only Turnover related to the principal fish processing activity.</p>

VARIABLE GROUP	Variable	Definition	PGECON advice	ISSG fish processing suggestion	Methodology used
	Other income	<p>Other operating income included in company accounts, which are excluded from turnover; income coming from other activities than fish processing. Other income, not shown under other headings. Exclude extraordinary and financial incomes.</p> <p>Under “Other income” all the other revenues from other activities apart from fish processing should be provided.</p> <p>= DCF Other income</p>			<p>Directly obtained from additional DCF survey</p> <p>Under “Other income” all the other revenues from other activities apart from fish processing should be provided.</p>
LABOUR COSTS	Personnel costs	<p>Total remuneration, in cash or in kind, payable by an employer to an employee (regular and temporary employees as well as home-workers) in return for work done by the latter during the reference period. Personnel costs also include taxes and employees’ social security contributions retained by the unit as well as the employer’s compulsory and voluntary social contributions.</p> <p>= DCF Wages and salaries</p>			<p>Directly obtained from DCF survey</p>

VARIABLE GROUP	Variable	Definition	PGECON advice	ISSG fish processing suggestion	Methodology used
	Value of unpaid labor	= DCF Imputed value of unpaid labour			Directly obtained from DCF survey
	Payment for external agency workers (optional)	Included are payments to temporary employment agencies and similar organisations supplying workers to clients' businesses for limited periods of time to supplement or temporarily replace the working force of the client, where the individuals provided are employees of the temporary help service unit. However, these agencies and organisations do not provide direct supervision of their employees at the clients' work sites. Only the payments for the provision of personnel which is not linked to the provision of a particular industrial or other non-industrial service is included.			Directly obtained from DCF survey
Energy costs	Energy costs	Purchases of all energy products during the reference period should be included in this variable only if they are			Directly obtained from DCF survey

VARIABLE GROUP	Variable	Definition	PGECON advice	ISSG fish processing suggestion	Methodology used
		purchased to be used as fuel. Energy products purchased as a raw material or for resale without transformation should be excluded. This figure should be given in value only.			
Raw material costs	Purchase of fish and other raw material for production	Total purchases of fish and other raw material for production. Purchases of fish and other raw material for production include the value of fish and other raw material for production purchased during the accounting period for resale or consumption in the production process, excluding capital goods the consumption of which is registered as consumption of fixed capital. The fish and other raw material concerned may be either resold with or without further transformation, completely used up in the production process or, finally, be stocked.			Directly obtained from DCF survey
Other operating costs	Other operational costs	Total purchases of goods and services minus Purchase of fish and other raw material for production. Purchases of goods and services			

VARIABLE GROUP	Variable	Definition	PGECON advice	ISSG fish processing suggestion	Methodology used
		include the value of all goods and services purchased during the accounting period for resale or consumption in the production process, excluding capital goods the consumption of which is registered as consumption of fixed capital. The goods and services concerned may be either resold with or without further transformation, completely used up in the production process or, finally, be stocked.			
Subsidies	Operating subsidies	Direct payments which general government or the institutions of the European Union make to resident producers. Excluding investment subsidies.		Consider changes suggested for aquaculture for COVID subsidies. Text suggested for the Methodology: Subsidies can be obtained from: 1. national official statistics; 2. directly obtained from DCF survey, 3. obtained directly from administrative sources 4. indirect estimation Data from national and regional administrations for the whole processing sector, should be used, in preference to direct survey. This in turn will help to derive total income more precisely.	Directly obtained from DCF survey

VARIABLE GROUP	Variable	Definition	PGECON advice	ISSG fish processing suggestion	Methodology used
	Subsidies on investments	Direct payments which general government or the institutions of the European Union make to resident producers to finance all or part of the costs of their acquiring assets.			Directly obtained from DCF survey
Capital costs	Consumption of fixed capital	Decline in value of fixed assets, as a result of normal wear and tear and obsolescence. The estimate of decline in value includes a provision for losses of fixed assets as a result of accidental damage which can be insured against. =DCF Depreciation of capital			Directly obtained from DCF survey
FINANCIAL POSITION	Total assets	An economic asset is a store of value representing the benefits accruing to the economic owner by holding or using the entity over a period of time. It is a means of carrying forward value from one accounting period to another.			Directly obtained from DCF survey
	Debt	Amount of money borrowed to be used to finance activities of the processing enterprise.			Directly obtained from DCF survey

VARIABLE GROUP	Variable	Definition	PGECON advice	ISSG fish processing suggestion	Methodology used
Financial results	Financial income	Income from investments and loans forming part of the fixed assets, and other interest receivable. Financial costs, net = Financial expenditures – Financial income			Directly obtained from DCF survey
	Financial expenditures	Interest payable and similar charges. Financial costs, net = Financial expenditures – Financial income			Directly obtained from DCF survey
Investments	Gross Investments	Gross investment in tangible and intangible goods minus sales of tangible and intangible investment goods.			Directly obtained from DCF survey
Employment	Number of persons employed	Total number of persons who have worked in the enterprise, irrespective of the total number of hours.			Directly obtained from DCF survey
	Unpaid labour	Number of persons who have worked for the enterprise that have not received compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind.			Directly obtained from DCF survey

VARIABLE GROUP	Variable	Definition	PGECON advice	ISSG fish processing suggestion	Methodology used
	FTE National	The number of employees converted into full time equivalent jobs (FTE).			Directly obtained from DCF survey
	Number of hours worked by employees and unpaid workers	The aggregate number of hours worked during the reference period.			Directly obtained from DCF survey
Number of enterprises	Number of enterprises	Number of fish processing enterprises in each size category (<=10, 11-49, 50-249, >=250 in terms of number of persons employed).		Number of main and non-main activity enterprises should be transmitted separately. Size classes apply only to the main activity enterprises.	Derived from administrative source (license list exist in BFSA and is publicly available)
Raw material (OPTIONAL)	Weight of raw material per species and origin (optional)	Weight and value of raw material by: <ul style="list-style-type: none"> • Species (3-letter FAO code) • Production environment Origin (Capture based fishery and aquaculture sector) • Country of Origin (Domestic, other EU, non-EU) 		Text suggested for the Definition: Weight and value of raw material by: <ul style="list-style-type: none"> • Species (3-letter FAO code) • Production environment Origin (Capture based fishery and aquaculture sector) • Country of Origin (Domestic, other EU or non EU) Recommendation: If collecting the volume of raw material also by typology of processing it is recommended to provide data according to the following categories: fresh, frozen and semi processed materials.	Directly obtained from DCF survey

VARIABLE GROUP	Variable	Definition	PGECON advice	Methodology used
SOCIAL VARIABLES	Employment by gender	Total employment (paid labour and unpaid labour) as defined for the fleet, aquaculture and processing sector economic variables by gender	<p>1. Data should be raised to the total population.</p> <p>2. Employment data reported in the social data calls should be consistent with the data reported under the Fleet and Aquaculture data calls.</p>	<p>Obtained directly from survey PGECON recommends to follow Eurostat practice and separate social variable "<u>Employment by gender</u>" in the following groups:</p> <ul style="list-style-type: none"> - "Male"; - "Female"; - "Unknown" (only if needed).
	FTE by gender	The number of employees converted into full time equivalent jobs (FTE). Fleet: People working only onshore and paid from vessels should be included if their activity has a direct link with the fishing operations. Employment on shore should include those activities, which directly related to small-scale fisheries and mostly carried out by fishers and their family members, but not entirely related to other economic sectors and specialties.	<p>3. PGECON recommends to stratify employment data for the social data call related to the EU fleet by supra region, geo-indicator, fishing activity (SCF, LSF and DWF) and main fleet segments, when possible. It is suggested to follow main AER group definitions as close as possible.</p> <p>For the employment data for the social data call related to the EU aquaculture sector, it is recommended to follow the same segmentation as for the aquaculture data call when possible, or at least to disaggregate by marine (finfish), freshwater (finfish) and shellfish.</p> <p>4. It needs to be further investigated the trade-offs of</p>	<p>Obtained directly from survey PGECON recommends to follow Eurostat practice and separate social variable "<u>Employment by gender</u>" in the following groups:</p> <ul style="list-style-type: none"> - "Male"; - "Female"; - "Unknown" (only if needed). <p>Figures for the number of persons working less than the standard working time of a full-year full-time worker, should be converted into full time equivalents, with regard to the working time of a full-time full-year employee in the unit. It is the total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory. Since the length of a full-time job has changed through time and differs between industries, methods which establish the average proportion and average hours of less than full-time jobs in each job group have to be used. A normal full-time week must first be estimated in each job group. If possible, a job group can be defined, inside an industry, according to sex and</p>

VARIABLE GROUP	Variable	Definition	PGECON advice	Methodology used
			providing the data for a particular date in the year so that duplications are avoided (e.g. when fishers are moving from one vessel to another during the year) or cover the whole year to include seasonal patterns.	(or) kind of work of people. Hours contractually agreed upon can constitute for employee jobs, the appropriate criteria for determining those figures. Full-time equivalent is calculated separately in each job group, then summed. Included in this category are people working less than a standard working day, less than the standard number of working days in the week, or less than the standard number of weeks/months in the year. The conversion should be carried out on the basis of the number of hours, days, weeks or months worked.
	Unpaid labour by gender	Unpaid labour, as defined for the fleet, aquaculture and processing sector economic variables by gender		Obtained directly from survey PGECON recommends to follow Eurostat practice and separate social variable " <u>Employment by gender</u> " in the following groups: - "Male"; - "Female"; - "Unknown" (only if needed).
	Employment by age	Total employment (paid labour and unpaid labour) as defined for the fleet, aquaculture and processing sector economic variables in the various age classes: <=14; 15-24; 25-39; 40-54; 55-64; >=65; Unknown		Obtained directly from survey

VARIABLE GROUP	Variable	Definition	PGECON advice	Methodology used
	Employment by level of education	<p>Total employment (paid labour and unpaid labour) as defined for the fleet, aquaculture and processing sector economic variables in the various education levels:</p> <ul style="list-style-type: none"> - Low for education levels 0-2 (ISCED2011 and ISCED1997); - Medium for education levels 3-4 (ISCED2011 and ISCED1997); - High for education levels 5-8 (ISCED2011), levels 5-6 (ISCED1997); - “Unknown” 		Obtained directly from survey
	Employment by nationality	<p>Total employment (paid labour and unpaid labour) as defined for the fleet and aquaculture and processing sector economic variables in the various nationality categories: National; EU; EEA; Non-EU/EEA; “Unknown”.</p>		Obtained directly from survey
	Employment by employment status	<p>Total employment (paid labour and unpaid labour) as defined for the fleet and aquaculture sector economic variables in the various employment status categories:</p> <ul style="list-style-type: none"> - Owner (vessel owner involved in vessel activity/operation); - Employee (all engaged workers on-board, excluding owners). - Unknown. 		Obtained directly from survey

4. Data storage and Confidentiality

All data from questionnaires is entered and stored in the electronic record-keeping system of the Agency.

The raw and disaggregated data is treated as confidential as well as all personal data according to REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

By Order, No RD-212/27.05.2020 of the executive director of EAFSA an information security management system was approved. The security management system consists of 21 documents, which are not published online due to security reasons, but all the employees in the agency are obliged to follow them. Within the documentation, protocols to enforce confidentiality are available.