# THE CONCEPT OF INTEGRATED FOOD POLICY

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Abstract. Careful observation of where food is produced and distributed reveals a mismatch between what is given, what is demanded and what is received. All this becomes an argument for structuring a coherent concept for harmonising food policy, as well as an issue calling for the integration of food policies. The objective of the study is to raise awareness recently and to propose technical and public policy solutions primarily at local community level, within citizens' groups. The solutions that emerged from the study are those relating to highlighting the elements of principle that provide the framework for the realisation of a Territorial Action Programme in food policy, particularly in densely populated areas. This guide is useful for achieving the necessary synergy between agricultural, environmental and social issues that intersect with the provision of quality food and food aid in a unified concept of Romanian integrated food policy.

Keywords: food, quality, distribution, policies, food networks

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#### 1. Introduction

The food system, as subtly defined by the founder of agrifood economics, Louis Malassis, is "the way in which people organise themselves, in space and time, to procure and consume their food" [19]. This characterisation of the food system in terms of how it is produced, consumed and organised, from a historical and territorial perspective, provides us with a highly relevant framework for analysis, perfectly in line with contemporary concerns about sustainable development.

The overlapping crises of climate change, energy, pandemics, armed conflicts, etc. have the direct or indirect effect of 'starving the planet' through a globally expanding food and freshwater crisis. It follows, of course not only in our view, that for the coming decades the number one priority will be food security and food safety. It is therefore more than appropriate to analyse and develop an Integrated Food Policy that is coherent and as harmonious as possible at systemic level [17, 22, 24].

The usefulness and topicality of the issues addressed is linked including for fruitful deliberations and concerted actions at the INTERFACE BETWEEN SCIENCE AND POLICY, the concepts of food systems and drivers of change all need to be clearly understood and used by all.

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In this context, the Romanian food model needs to become a truly precious collective asset, to be p assed on to future generations because it is essential for

securing food in the increasingly difficult conditions of the coming decades. It also highlights the fight against wastage and the promotion of food patriotism, which is so important in international competition. It is therefore necessary to CONCEPT a new integrated food policy at all levels (local, national, similar European and UN/FAO policies) [5, 21]. The promotion of local and quality collective food supply is one of the main lines of this policy all over the world [1, 2, 7, 8, 14, 16].

The concept of "food policy" has emerged in the last two decades as a response to the problems posed by the global food crisis [3,11, 20, 23]. It attempts to respond to the need to embrace the need to encompass a wider field of intervention than agricultural production and thus provide more appropriate responses to the problems of feeding the 'dependent' (not food producers).

Food policy encompasses all collective aspects of governments to influence responsibilities among farmers, consumers and the general public, as well as agents of change to achieve social goals and outcomes [23]. Thus, food policies and strategies aim to improve the quantity and quality of nutrition of a given population with similar incomes. They contain the set of activities that contribute to the food function in the respective society: the agri-food complex that is situated within the economic and social formation [18]. This underlines the importance of intersectoral links and the dynamics of the social actors themselves, which in some cases can be contradictory to an overall regulation. At the level of food policy made by the State, these interconnections are exercised in practice through choices constrained either by internal limitations (feasible changes, compromises between social groups) or by external limits (degree of autonomy and dependence).

We analyse a process of choice, involving adaptations, revisions and tactics, specific to food system policy. In this context, FOOD POLICY can be defined as a set of means and standards mobilised by governments and dominant actors in a food system to control, direct or regulate the various production processes and the different links of the agri-food chain according to specific objectives (security of supply, food security of vulnerable groups, etc.), but also because of precarious incomes or geographical marginalisation, or the defence of particular interests, etc. [10,12,15].

The objectives of the study are based on the need to conceptualize a new integrated food policy for Romania in order to converge with similar international policies (European and UN/FAO), based on the ADAPTATION of technological innovations to the Romanian lifestyle and way of eating, inherited from generation to generation in these lands, thus also having a genetic impact on nutrition. In this sense, based on the principles of science and management of food systems in convergence with the current political requirements, we propose a necessary approach to "create" in principle a MODEL of the Romanian food system in order to generate a coherent and effective food policy. Another objective refers to the INTEGRATED approach of the food system, which aims to ensure that, at local and then at national level, Romania has the best chances of securing food in the increasingly difficult conditions of today and of the unpredictable future, but also to fight effectively against waste, while promoting quality and food patriotism.

Also, similar to other approaches in the developed countries [1, 4, 6, 9, 13], it is desired to create a basis for debate, through the solutions and conclusions of the study, as a stage of analysis for the implementation of institutional and legal actions, such as a National Agreement on Collective Feeding (ANAC), the development of variants of National Integrated Food Policies (PAIN) and Territorial Integrated Food Policies (PAIT), the renewal of legislation and regulations on harmonized bases (through: optimization, integration, coherence and honesty). All this is necessary for another step, that of achieving in the long term a holistic legal code, i.e. a Rural and Maritime/Mountain Product Code (CPMR) grafted on Romania's specific conditions.

### 2. Materials and Methods

Using a series of multi-criteria analyses, comparisons and statistical processing, the study is based on a managerial and legal diagnosis with a focus on the socio-economic aspects of the components of the Romanian food system. It considers the principles, techniques and regulations specific to sustainable development in relation to food provision.

#### 3. Results and Discussions

The study focused on the issues at the heart of the topic, first of all by defining, in the current international context, the notions of "food system" and "food policy". Then the "grassroots" aspects, i.e. territorial food programmes, are analysed as the conceptual basis for systematising the concept at national level. As a pragmatic end, the study describes the typology of institutions and framework legislation for

the integrated food policy to take shape and then be applied and converge with similar policies in European countries and Europe as a whole.

It can be seen that food systems as a whole are made up of a multitude of complementary components (subsystems), which have generated the following definition: "FOOD SYSTEMS encompass the full range of actors and their interconnected value-adding activities involved in the production, aggregation (joining), processing, distribution, consumption and disposal (loss or waste) of food products from agriculture (including livestock), forestry, fisheries and the food industry, together with the broader economic, societal and physical environments in which these activities are embedded" [Nguyen, H., 2018 / FAO, in Sustainable food systems Concept and framework].

Based on the above we will adapt and define the integrated food policy approach for our country as follows:

INTEGRATED FOOD POLICY is a unitary and coherent concept applicable to Romania's specific conditions, which aims to ensure that the population has access to safe, healthy, diversified food of good quality and sufficient quantity, produced under conditions that are economically and socially acceptable to all, and which promotes employment, protects the environment and landscapes and contributes to mitigating and adapting to the effects of climate change.

## 3.1. Basic features of the food system

Starting from the structural components of the food system, i.e. 'production', 'processing', 'marketing' and 'consumers', we can highlight the integrating elements through which the food system expresses itself (Fig. 1).

It is useful to summarise the main characteristics of human nutrition that the integrated food system concept must take into account: health, nutrition, food aid, food education, food waste, territorial anchorage, circular economy, environmental protection and biodiversity.

An initial overview of all these aspects can be provided by the Food and Nutrition Framework Programme (FNFP), as an approach to integrating the above-mentioned characteristics, on the basis of which coherent and convergent food policies can be drawn up at both local and integrated national level. We consider that the FNFP has two basic strands: one concerning the technical-economic component and the other concerning the social impact. Thus, on the techno-economic side, successful public policies will basically be at the intersection of health conservation, environment and agro-ecological transition. On the social

side, there are at least three key areas to be covered by public policies: social justice, the fight against food waste and food education, especially for young people.

Having established the basic principles and guidelines, it is useful to analyse the current Romanian food system in order to consider the corrections needed to implement an integrated policy.

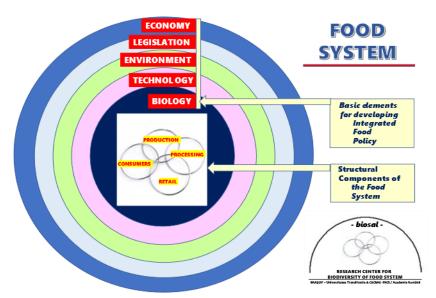


Fig. 1. Integrating elements of the food system

As the problem is complex, in the present study we will only illustrate a few aspects that stand out: harmonisation of economic indicators between the structural components of the food system; quality in relation to food and culinary recipes in the Romanian food system; coherence and harmonisation of product standards; correct information and communication to consumers regarding the labelling system.

# 3.2. Food policy principles and directions for action

Food policies are directly linked to global development strategies, where frequently three types of issues limit the room for manoeuvre in defining a food policy: (1) the place given to agriculture in state accumulation, employment policy and balance of payments equilibrium; (2) the growth rate of the number of food dependents; (3) the coalition of social forces supporting incumbent regimes and influencing the way the state proceeds in social arbitration (see conflicting interests between components of the food system, marketing manipulations and

misinformation in standardisation and labelling). For these and other reasons, food policy is meant to be as comprehensive as possible. It thus describes the direction in which the different components of the food system operate and which are 'covered' by sectoral policies: agricultural, nutritional, or social policies (Table 1). The international institutions debating at the UN (governments, cooperation bodies, research institutes) analyse the context methodologically, but also pragmatically. As a result, a first step could be the elaboration of a conceptual approach of general and territorial directions of analysis and action (Table 2).

Table 1. Components of the food system as guidelines for public food policy making

Relevant intervention	Projects	Programmes	Policies
Agricultural Policy	Product development localised perishable     Valorisation projects of perishable products	Action on a pipeline	Supporting producer prices / subsidies and inputs / protection of domestic priceless products / solutions to "wild" currency devaluation
Food Policy	- Food stamps - Discount stores	General food rationing	Income policy / consumption subsidies / import policy / exchange rate overvaluation
Nutrition Policy	- Nutritional education	General supplementary measures in the school and health environment	Food health policy

**Table 2.** Decalogue of related public policies in integrated food policy

No.	Concrete and necessary food public policy issues
1	Food security and safety policy (on the 4 groups: social environment, economic and
	political / agri-food sector performance / social protection / health and hygiene).
2	Food marketing and distribution policies.
3	Policies for correct communication on food and the fight against manipulation.
4	Policies on food supply and preservation systems.
5	Policies on food waste management and policies on social statistics on Food supply to
	the population.
6	Feeding policies for vulnerable social groups : orphaned children / elderly below poverty
	line / severely disabled / homeless people.
7	Policies on traditional food and food innovation of local communities, including local
	historical dishes.
8	New food policies: biodiversity enhancement / analysis and research systems new
	technologies / professional communication - scientifically correct.
9	Healthy food policies: mountain products / organic food and/or functional foods and

	food supplements / nutraceuticals.
10	Prevention and food safety policies on "food-health" impact (prevention of metabolic and
	nutritional diseases).

# 3.3. Integrated food issues at territorial (including local level)

As can be seen, food systems exist at different scales: global, regional, national and local. Of primary interest we consider territorial (local level) food systems around the world because they support the idea of 'globalisation through glocalisation'. The main argument is food diversity at the local community level. Basically these systems share some key characteristics, but any attempt to change them should reflect their uniqueness, which results from local traditions, cultures, economic structures and ecologies.

Food waste management is a topical issue, as a quick solution to increasing global food security and avoiding an undesirable food crisis caused by human, environmental or biological factors. According to recent global studies (Global food losses and food waste, FAO) about 1/3 of food for human consumption is lost along the food chain, from initial agricultural production to final consumption in households. Consequently, there is a need for a legislative package on this issue, coherent and convergent with the concept of an integrated food policy.

It is therefore appropriate to draw up Territorial Integrated Food Programmes (TIFPro), whose role is to coordinate, guide and list the actions of local authorities, economic units, producer associations (cooperatives) and citizens. By adapting the TIFPro to the specificities of the given territory, i.e. at locality level (urban or rural), and through interoperability between those involved in agricultural production, food processing, the needs of the population, etc., it provides a space for dialogue between local actors, useful for finding solutions in the field of food policies at local level. The main elements of the programmes proposed in this study on integrated territorial food policy can be divided into: 4 axes & 2 levers of action, with a total of 10 activities and 35 actions (Table 3 and 4).

**Table 3.** Key elements along the **axes** of the Territorial Integrated Food Programme (TIFPro)

Priority axes	Activities	Actions (with deadlines)
Axis 1 –	I. Supporting the development of	Action 1: Identify farmers and producers of quality food in the given territory (traditional products, mountain products, organic products, etc.)
Territorial networks	territorial quality food networks	Action 2: Inventory of agri-food products on the basis of quality, authenticity and originality, including

validation as a product with cor	atrolled origin (laboratory
analysis, labelling)	ittofica origin (laboratory
Action 3: Highlighting supply	and marketing routes and
establishing the food network a	
II. Avoiding of Action 4: Supporting platforms	
elilillating marketplaces) for matching sun	
intermediaries level, both in terms of institution	
etc.) and the digitisation of thei	r activities.
Action 1: Set health targets for	reducing sugar, salt and
fat and increasing fibre and pro	mote voluntary
commitments by economic ope	rators to improve the
quality of the food supply and e	-
	ĵ
I. Improving respected.	
and diversifying the Action 2: Long-term monitorii	
food supply quality of the food supply throu	igh the Food Observatory
(conducting analyses)	
Action 3: Measuring impact or	n dietary habits and
population exposure	
Action 4: Developing a human	nutrition component of
the Romanian protein strategy.	
Action 5: Developing territoria	I initiatives to combat
II. Combating food food insecurity	1.11
insecurity for an Action 6: Improving the quality	y and diversity of food
inclusive food donations	1 1 1
Social Justice supply (solidarity)  Action 7: Providing social wor	
digital and interactive education people in precarious situations	
Action 8: Make the Food Obse	
composition, beyond nutritiona	
accessible to consumers.	r quanty, casily
Action 9: Development of an e	experimental approach to
the labelling of collaborative fa	rming methods within
the National Food Council (NF	
Action 10: After consulting the	NAC, promote
III. Strengthening consumer information on the va	arious components
consumer (nutritional, health, environmer	ntal) of food quality
information <u>Action 11:</u> The experiment on	the origin of milk and
meat ingredients will be extend	ed
Ation 12: Exposure of children	and adolescents to
advertisements for junk food ar	
Action 13: Ensure the quality a	
applications that inform consum	
choices.	ners about their root
Axis 3 – Action 1: Extend the legislative	e provisions to the mass
I. Information on catering and agri-food sectors.	- provincio do die mass
Combating target groups Action 2: Promoting "gourmet	gastronomy" among

		Action 3: Creating a territorial (and national) zero waste challenge in secondary schools.  Action 4: Better explain to consumers the meaning of food consumption data
Axis 4 – Food education	I. Developing nutrition education for young people	Action 1: Food education from kindergarten to high school will be strengthened through the development of educational tools dedicated to nutrition education  Action 2: Make agricultural education students and teachers ambassadors of NIFP and TIFP.  Action 3: Conduct and continue "Tasting Courses" to promote taste awareness among young people  Action 4: Promote school feeding programmes "Fruit and vegetables at school" and "Milk and dairy products at school", "Honey at school" etc.
(especially for younger people)	II. Technical and informational enhancement of the Romanian food heritage	Action 5: Development of study programmes in high schools and universities in the field of digitization of agri-food system components (Agricultural Computer Engineer, Farm Technology Officer, Food Informatics Engineer, Gastro-food Informatics Specialist)  Action 6: Creation of a series of symposia on "Behind the scenes of Romanian food" as part of the Romanian Food Day.

**Table 4.** Key elements on the pragmatic **levers** of the Territorial Integrated Food Programme (TIFPro)

Action levers	Activities	Actions
Action levers	Activities	(with deadlines)
Lever 1 - Directorate for Accelerated Food Transition	I. Collective catering: a winning partner for food	Action 1: Mobilise collective feeding to ensure that 50% of products are organic, quality/sustainable by the yearX  Action 2: Promoting plant proteins in the collective diet.  Action 3: Publish and disseminate new nutritional recommendations for mass catering menus, especially for schools.  Action 4: Running the training course "Canteen pleasure in schools" and adapting it to current solutions Action 5: Promotion of the National Charter for Responsible and Sustainable Nutrition in health care facilities.  Acțiunea 6: Support local authorities and businesses to switch to plastic substitution in central kitchens.
	II. Territorial food	<b>Action 7:</b> Supporting local actors in the development of
	projects: joining	territorial food projects by developing toolkits,

forces at local level	indicators, training.
for better nutrition	Action 8: Promote territorial food projects to support
	virtuous local initiatives that contribute to anchoring
	quality, healthy and sustainable food in territories and
	combating food insecurity.

Without going into details we consider it useful to exemplify some major projects as pillars to implement the Integrated Food Policy Concept in the practical building of the Romanian Integrated Food Policy (Table 5).

**Table 5.** Examples of framework projects in the Romanian integrated food policy

No.	Project	Specification
1.	Agro-ecological project	with concrete action plans to achieve the agro-ecological policy: setting the number of "organic" operators per year of development; the area of organic farming (in ha); the market for organic agri-food products (in billions of euros); broadening the target of "responsible" consumers (reconciling healthy eating with respect for the environment)
2.	Collective feeding project	with plans for equal access to healthy and quality food for the citizens of territorial localities
3.	Integrated urban food policies	with the development of sustainability co-benefits, spatial linkages, social and sectoral inclusion to transform food systems in urban regions
4.	Food Transition Pact	<ul> <li>with holistic use for sustainable and healthy consumer products on the food transition on five principles and challenges: <ol> <li>health and nutrition;</li> <li>packaging;</li> <li>sustainable and organic agriculture;</li> <li>responsible communication;</li> <li>transparency.</li> </ol> </li> </ul>

# **3.4.** Development of institutions and related legislation in integrated food policy

Just as the world needs a new global food policy agreement in which a wide range of partners (such as the Gates Foundation, the Food and Agriculture Organization, the World Food Program, and the International Fund for Agricultural Development; other multilateral development banks; agricultural research institutes; developing countries with great experience in agriculture, such as Brazil; as well as the private sector) need to be integrated and mobilized, so too does the need to mobilize all actors in the country to achieve a Romanian food policy agreement.

Optimisation of food production and marketing at national and territorial level requires a national agreement that will make possible legislative coherence for economically efficient and systemically sustainable management. Therefore, a very important but difficult step is the harmonization of opinions and interests in a National Collective Feeding Agreement (NFA) necessary for the legal revision and correlated adaptation on the basis of this *Agreement* in the elaboration of the Romanian Integrated Food Policy. This is because there are currently in force, but without real convergence and synergy, and even contradictory, a host of legislative regulations specific to public and collective food, both in terms of food production and the management code, from transport to recovery.

In the sense of a Romanian Integrated Food Policy, it is necessary to RENEW LEGISLATION on the harmonised basis of a real optimised, integrated, coherent and honest food system, in order to start Integrated Food Policies at national and local level (NIFP, TIFP), as well as to design the general aspects of the food sector, on land and at sea: by drafting and adapting the Rural and Maritime Fisheries / Mountain Product Code (RMMC), the latter having the content established at international level, but adapted to the Romanian specificities (Table 6).

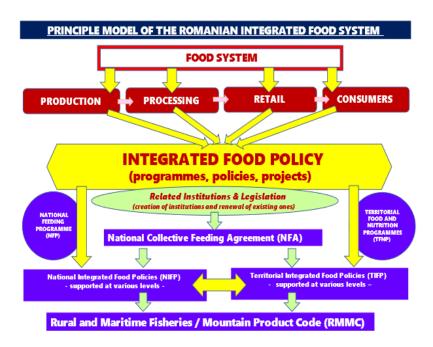
**Table 6.** Rural and Maritime Fisheries/Mountain Product Code (RMMC)

Book I	Development and equipping of rural areas: definition of the land development and rural settlements	
Book II	Veterinary public health and plant protection including definition of National Food Programme	
Book III	Agriculture / farms	
Book IV	Rural rental/leasing contracts, leases	
Book V	Professional agricultural organisations	
Book VI	Production and markets, including definition of interbranch organisations	
Book VII	Social provisions : i.e. provisions on the social protection of	
	self-employed persons in the professions agricultural occupations	
Book VIII	Agricultural education, training and professional development,	
	agricultural research	
Book IX	Marine fisheries and marine aquaculture & Annex : Products and	
	Montanology	

At the international level, food systems are centred on the FAO's main objectives, which include poverty reduction, food security and nutrition [25]. Taking these aspects into account, but also integrating them into the wider performance of the system, the idea arises to refer in particular to the three dimensions of sustainability, which are also highlighted in the Romanian food policy model, namely: the economic, social and environmental dimensions.

In this comprehensive context, it is necessary to draw up a general organisational system and integrated food policy in Romania. And as a logical and coherent consequence, this leads to the TYPOLOGY AND THE NEED FOR INSTITUTIONS at central and local level, with all legislation being in line with the general conceptual framework (categorically excluding conjunctural political interference, an idea expressly stipulated in the National Agreement). In this way it becomes possible to build a long-term MODEL OF THE ROMANIAN INTEGRATED FOOD SYSTEM (Fig.2).

Without going into details, it follows from the analysis of the scheme that within the framework of the integrated food policy it is necessary to complement the agricultural, food and nutrition policy based on programmes, policies and projects within a framework of national interest.



**Fig. 2** – Block diagram of the Romanian food system framework model in the conceptual expression of the Integrated Food Policy

Last but not least, a necessary step towards achieving an integrated food policy based on the beneficial link between science and policy is to set up a national (and governmental) advisory Council on Romania's food policy, comprising leading researchers and academics, together with representatives of employers, trade unions and civic organisations in the field.

#### **Conclusions**

- (1). INTEGRATED FOOD POLICY is the coherent guide that has the power to ensure that people have access to safe, healthy, diversified and sufficient food of good quality and produced in economically and socially acceptable conditions for all, which promotes employment, protects the environment and landscapes and contributes to mitigating and adapting to climate change.
- (2). The convergence of agricultural, food and nutrition policy based on programmes, policies and projects is necessary within the framework of the integrated food policy. It is appropriate to implement PROGRAMMES supporting the Romanian food system, such as: *National Feeding Programme (NFP)* and *Territorial Food and Nutrition Programmes (TFNP)*, anchored on a series of POLICIES based on various PLANS: Plan on the implementation of food networks; Plan on nutrition and health; Plan on food aid; Plan on awareness raising, education and communication operations, etc. The policies covering the Romanian food system are outlined in a "decalogue" of public policies as an indicative guide with concrete directions for action.
- (3). Complementarity, convergence and integration of food policies and related legislation is crucial to avoid disharmonies in the food system, and basic PRINCIPLES and GUIDING INDICATORS need to be developed on the harmonisation of economic indicators, product standards and labelling systems, with basic application at territorial level. As action steps we mention: Territorial Integrated Food *PROGRAMMES* / TIFPro (on 4 axes, with distinct components on *ACTIVITIES* and *ACTIONS*, accompanied by *SPECIFIC PROJECTS*, e.g.: *Agro-ecological project, Collective Food Project, Urban Integrated Food Policies*).
- (4). The concept, the principles and the directions of action, support the elaboration of the INTEGRATED MODEL of the Romanian Food System by specialists (not by politicians), in order to be the working basis for its expression through an INTEGRATED FOOD POLICY at national and local level (where politicians help to implement).
- (5). The model requires a few pillars to ensure a long-term effect, namely a National Collective Feeding Agreement (NFA), on the basis of which Food and Nutrition Programmes can be developed at national and territorial level (including at locality level), programmes in which it becomes possible to legally renew the *Food System* through appropriate public policies, as well as the development of a unitary legal code, grafted on Romania's specific conditions, namely the Rural and Maritime Fisheries / Mountain Product Code (RMMC).

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