

# INTEGRATED FOOD POLICIES FOR THE SUSTAINABLE DEVELOPMENT OF THE MOUNTAIN AREA IN ROMANIA. CASE STUDY: THE MUNICIPALITY OF BRAȘOV

Liviu GACEU<sup>1,2,3\*</sup>, Romulus GRUIA<sup>1,2,3</sup>, Oana Biana OPREA<sup>1</sup>

<sup>1</sup> Transilvania University of Brașov, Eroilor Blv. no. 29, 500036, Brașov, Romania

<sup>2</sup> National Institute of Economic Research "Costin C. Kirițescu", Centre of Mountain Economy CE-MONT, Petreni no. 49, 725700, Vatra Dornei, Romania

<sup>3</sup> Romanian Academy of Scientists, Ilfov Street no. 3, sector 5, 030167 Bucharest, Romania

\* Corresponding author: [gaceul@unitbv.ro](mailto:gaceul@unitbv.ro)

## Abstract

The paper first reviews the main characteristics of the mountain food system and a series of territorialization elements of the mountain food product on the relationship: mountain rural space – urban space. At the same time, the global trends regarding food policies for the sustainable development of the rural space are presented, with applications to the mountainous area in Romania. The research methodology used provides techniques for mapping the food environment, by including all actors in the Brașov metropolitan area (environment, education, government, business, civil society). The results of the study emphasize the fact that the actors of the governance component of the social helix (municipalities, town halls, prefectures) must assume the leadership role in the design and promotion of food policies through integrated food policy networks. The power relationship between the cities and the mountain countryside must be managed correctly, in a way that allows the development of the mountain countryside in all its aspects, economic, social, cultural.

**Keywords:** integrated food policies; mountain area.

## INTRODUCTION

The food system, according to the subtle definition given by the founder of the agro-food economy, Louis Malassis (1988), is "the way in which people organize themselves, in space and time, to procure and consume their food" (Le Coz and Malassis 1988). This characterization of the food system through its mode of production, consumption and organization, in a historical and territorial perspective, offers us a very relevant framework of analysis, in perfect accordance with contemporary concerns of sustainable development.

Overlapping crises regarding climate change, energy, pandemics, armed conflicts, etc. have the direct or indirect effect of "*starving the planet*" through an expanding global food and fresh water crisis. It follows, of course not only in our opinion, that for decades to come, the number 1 priority will be food security and food safety. That is why it becomes more than appropriate to analyze and develop an Integrated Food Policy, coherent and as harmonious as possible at a systemic level (Boussard 1987; Ceget and Orstom 1987; Chopra 1981).

The usefulness and topicality of the issues addressed is also related to fruitful deliberations and concerted actions at the INTERFACE BETWEEN SCIENCE AND POLICY, the concepts of food systems and change factors, all of which must be clearly understood and used by all (fao.org).

"FOOD SYSTEMS include the full range of actors and their interconnected value-added activities involved in the production, aggregation (combination), processing, distribution, consumption and disposal (loss or waste) of food products from agriculture (including animal husbandry), forestry, fisheries and the food industry, together with the wider economic, societal and physical environments in which these activities are embedded" (Charvet 1987; Charvet 1988, Perlik 2019).

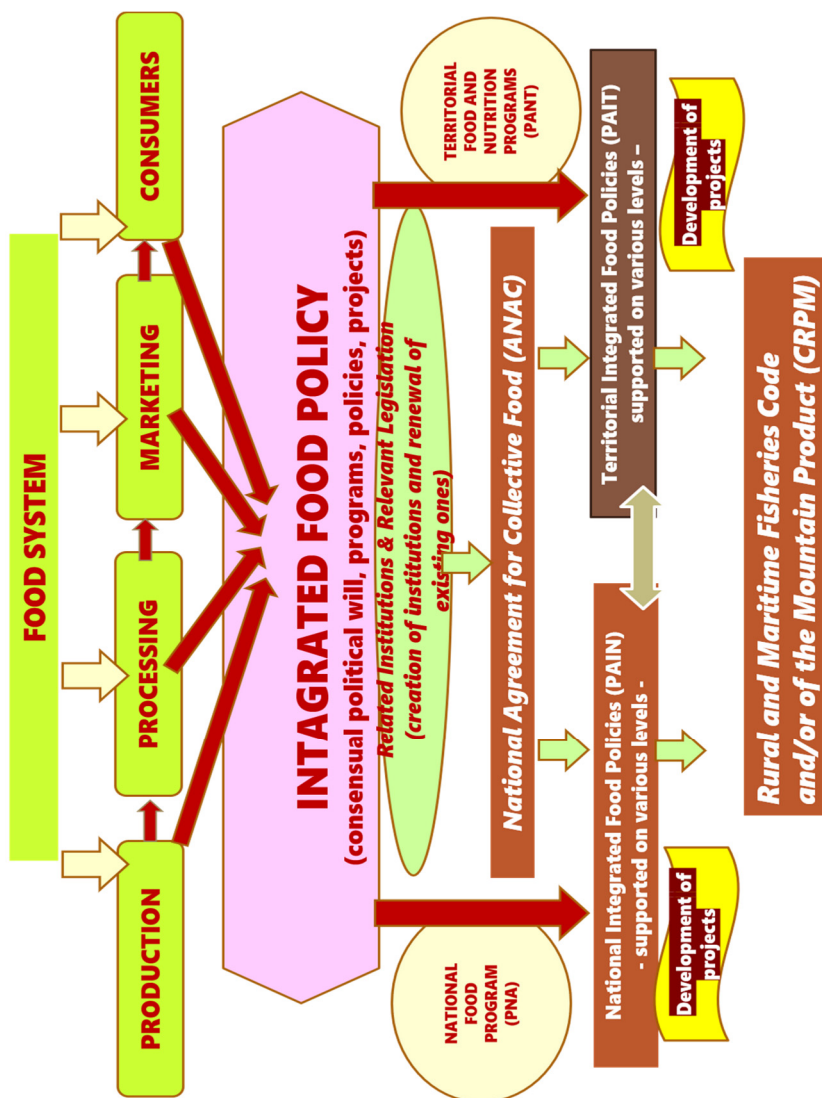


Fig. 1. Scheme of the integrated food policy concept (Gruia 2003)

THE INTEGRATED FOOD POLICY (Fig. 1) represents a holistic approach with a legal character in the pragmatic expression of reality and concrete situations, based on a unitary

and coherent concept applicable to Romania's specific conditions, which in principle requires: ensuring the population's access to a safe diet, healthy, diversified, of good quality, in sufficient quantity, produced in economically acceptable conditions, which favors social integration, protects the environment and landscapes and contributes to mitigating and adapting to climate change.

**The Mountain Regional Food System.** At the regional level, an integrated food system creates shorter, location-based links between producers and consumers in all aspects of the food supply chain, from agricultural production systems to processing, distribution, retail, consumption and waste management.

The objectives of mountain regional food systems include: economic development, environmental benefits, human health and well-being, social equity (Byerlee et al. 2006; Fisher et al. 1988).

The specialized literature indicates a series of anomalies in the urban-rural mountain area relationship, such as some food policies developed by Swiss cities. They have strong links with mountain territories, the latter being considered almost exclusively AS SPACES OF FOOD PRODUCTION AND ECOSYSTEM SERVICES, and not as places characterized by their own specific food systems (Duglio et al. 2023; Gruia 2003; Gruia 2018).

Unfavorable conditions from the point of view of economic competition resulted in a gradual reduction of agricultural production for local consumption, the mountain area gradually specializing in AGRI-FOOD PRODUCTS FOR EXTERNAL OR TOURIST MARKETS, or becoming areas, where agriculture is so fragile, of from a social and economic point of view, that some researchers have questioned its very ability to survive (Rey 2020; Flury 2013; fao.org).

As Perlik (2019) points out, the main role that mountainous regions have assumed in the contemporary liberal system – that of providing products and services for external markets – makes them dependent on cities, under the conditions of power inequalities that characterize these economic exchanges and the system of governance in which they are embedded. Some have even postulated the existence of a "FOOD NEO-COLONIALISM" of the city to the mountains (Slater et al. 2022), consisting of flows, practices, policies and a debate in which the mountains are seen as A FOOD-PRODUCING SPACE for the city, reducing the specific characteristics and complexity of the systems mountain food. Thus, problems of food security and sovereignty of the people living in these regions arise (Perlik 2019).

In order to counteract these phenomena, the most significant model of cooperation is the one presented in the paper: "**A VISION OF SUSTAINABLE DEVELOPMENT – MOUNTAIN – FOCUSED ON THE VALUATION OF QUALITY "MOUNTAIN PRODUCTS". THE GROWING IMPORTANCE OF MOUNTAIN AREAS IN THE POST-CORONAVIRUS ENVIRONMENT**", edited by ROMANIAN ACADEMY, DEPARTMENT OF ECONOMIC, LEGAL AND SOCIOLOGY SCIENCES, NATIONAL INSTITUTE OF ECONOMIC RESEARCH "COSTIN C. KIRIȚESCU"/CENTRE de ECONOMY MONTANĂ, "CE-MONT" VATRA DORNEI (Fig. 2) (Rey 2020). In order to evaluate the possibilities of implementing this model in the Braşov metropolitan area, a detailed diagnosis of the local food system was carried out, according to the research methodology presented below (Gruia 2003; Gruia 2018; fao.org).

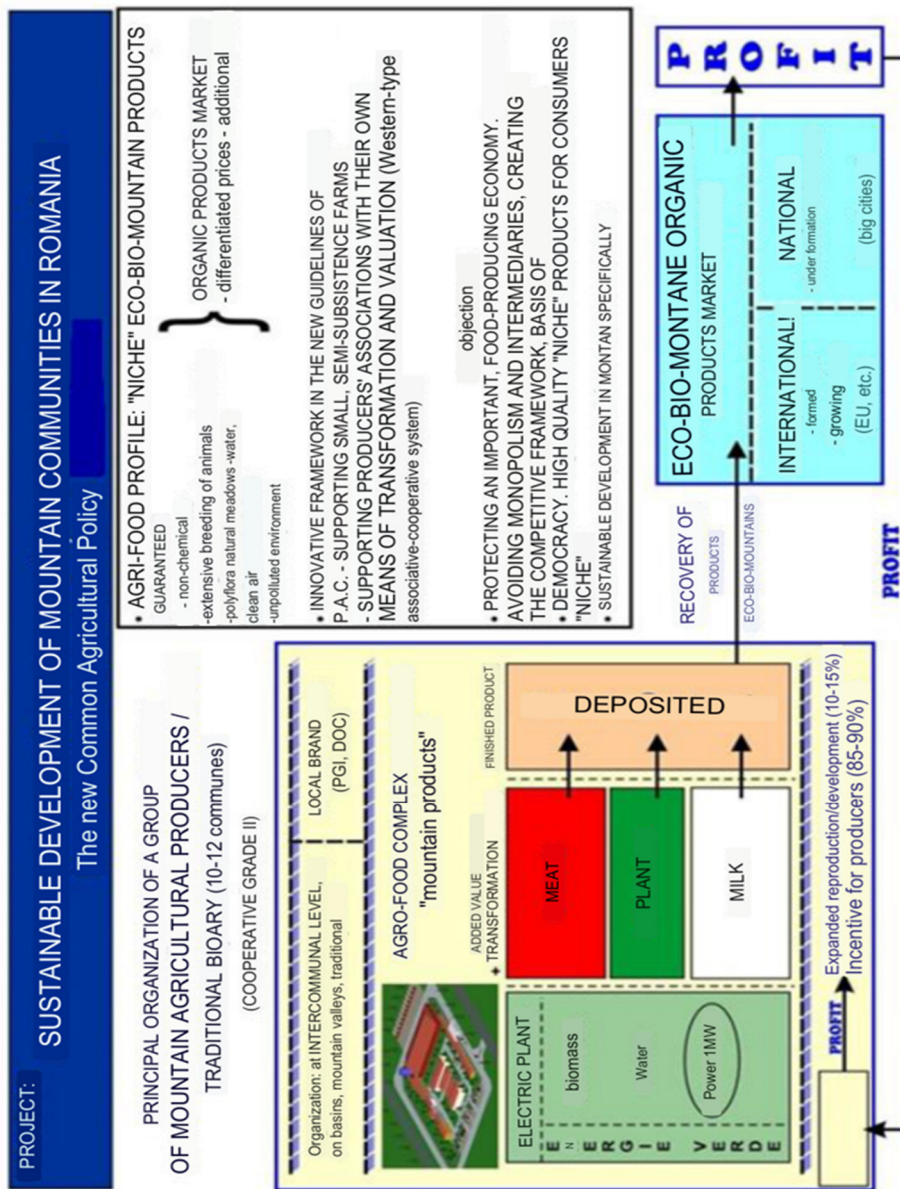


Fig. 2. Sustainable way of organizing groups of mountain agricultural producers (Radu Rey, 2020)

## RESEARCH METHODOLOGY

The research carried out at the level of the food system in the Braşov metropolitan area was carried out in order to identify the networks and actors involved in the urban-rural food system, the capacities, activities and relationships between them.

Thus, it was evaluated: where they are positioned in the Helix (civil society, research, politics, business); what is their role in the city-region food system and why they were included in the mapping; if they are already part of the FPN (food policy network) initiative and how, or are they new or potentially new actors; their potential and/or actual capabilities in relation to the objectives of the FPN, their motivation to participate in the FPN (if applicable); relevant formal/informal relationships with other actors; additional relevant information in relation to the general aims and objectives of the FPN.

In the second stage, other valuable actors who are not currently included in the FPN were identified; reasons for their lack and why they might be valuable.

In the third stage, the following fundamental components of an integrated food policy were evaluated:

- **Co-benefits** (interdependent economic, social and environmental): Considering the actors included in the mapping, is there an opportunity to obtain co-benefits? Is there a trade-off between the objectives of the actors (eg environmentalists vs farmers)? If there are, how are they addressed? Which actors could collaborate more or more effectively?
- **Linkages:** urban, peri-urban and rural areas: do any of the actors contribute to the creation or strengthening of mutually beneficial relations between urban-rural areas (or vice versa, i.e. negative, exploitative)? If so, in what way?
- **Inclusion:** the inclusion of all actors in the food system: which type of actors are most involved with FPN so far and why? Did you manage to address vulnerable people/groups? If so, why type? What capacities are needed to foster or improve their involvement in the FPN?
- **Connections** between food and other policies: to what extent do the actors involved belong to different sectors? Are there actors involved from different scales (spatial or governance)? What capacities are needed to foster or improve their involvement in the FPN?

## RESEARCH RESULTS

Following the research carried out, a number of 26 important actors of the social helix were identified who actively participated in the evolution of the food system in Braşov. Some of them, especially small producers, operate in the mountain area, and the connection with the municipality of Braşov is particularly important for the valorization of the mountain food product.

**Table 1. List of the main stakeholders from Brasov FPN (food policy network)**

Helix Societal segment	Institution/ Organization
<b>1. Governance</b>	Brasov City Hall
	Brasov City Council
	DSVSA Braşov
<b>2. Business/Industry</b>	Sergiana
	Olympus (Brasov Milk Factory)

<b>Helix Societal segment</b>	<b>Institution/ Organization</b>
	Doripesco Group
	Selgros Brasov
	Harman Farm
	Rose Story
	Braşov Markets Service
	La Doi Pasi store chain
	Innkeepers' Guild
<b>3. Civil Society</b>	The tenants' association
	HighClare Consulting
	The Joy of the NGO Gift
	Hospice House of Hope NGO
<b>4. Education/Research</b>	Faculty of Food and Tourism
	Faculty of Medicine
	College for Agriculture and Food Industry "Tara Bârsei" Prejmer
	Braşov School Center for Inclusive Education
	Maria Baiulescu Technical College
	High school with a sports profile
<b>5. Environment</b>	Environmental Protection Agency
	Carpathia Foundation
	Romanian Society of Ethnopharmacology
	WWF

A number of initiatives related to the food system have been identified, involving producers in the mountain area:

- According to HCL no. 380 / 20.07.2021, the local council established the products that will be granted free of charge within the "Program for Romanian schools for the 2021–2022 school year". It is approved by the board every year. Starting in 2021, the quality of products delivered to schools will be higher, as criteria such as certified organic products and products from local producers will be taken into account in the public tender procedure.

At least 10% of the products must be ECO certified, at least 30% must come from local producers, farmers, cooperatives and associations. Direct deliveries from producer to consumer are encouraged, offers involving more than 2 supply chain operators are not accepted. Thus, when determining the winner, 50% of the lowest price criterion will be taken into account, while the other 50% represents the quality of the products offered by the supplier.

- Supporting local producers, part of the "Integrated Development Strategy of the Braşov Metropolitan Area", strategic objective 2 – Innovation, entrepreneurship and human capital: Attracting companies from ZMB and supporting the development of existing ones towards areas of specialization, intelligence and innovation;
- The Braşov Markets Public Administration Service will organize flying markets in the form of producer fairs in 2023. Access to these fairs will be allowed only to producers from the mountain agricultural area and agri-food companies that have places to sell in the agri-food markets of the municipality of Braşov.

The Public Administration Service Pieţe Braşov is equipped for this purpose with all the furniture and facilities necessary for a good organization, it will be involved as much as possible in the marketing and promotion of events for authentic producers and their products so as to satisfy the requirements of the citizens of Braşov and create a connection between them and producers.

For the organization of these fairs, the following locations have been identified in the neighborhoods of Braşov: The land in the Răcădău neighborhood – Trandafirilor Park; The land in the Noua district, Levănţicăi str. No. 2.; The land in the Triaj neighborhood – Harmanului str. the land opposite the end of lines no. 1 of RATBV 3; the land in Piaţa Unirii no. 1 located on the pedestrian street between the store "La doi paşi" and the church gate.

Initial steps have been taken to issue town planning certificates for this initiative.

- A series of institutions from the civil society area with an important role in promoting the mountain were identified:

- *Conservation Carpathia Foundation*

Established in 2009 with the aim of stopping illegal logging and conserving a large area of Carpathian forests for future generations, this actor aims to create a world-class wildlife protected area in the southern Carpathians, serving as a conservation paradigm in Europe and standardization as the most famous and emblematic national park on the continent. The park will be large enough to support significant populations of large carnivores and allow natural evolutionary processes to take place. The project includes the Făgăraş Mountains Natura 2000 site, the Pietra Craiului National Park and the Leaota Mountains, for a total of over 250,000 ha. The foundation has a potential role in the future of FPN due to its involvement in creating a green economy around the Făgăraş Mountains, for the benefit of biodiversity and local communities. The Foundation collaborates with the Municipality of Braşov and other national and local institutions, NGOs and private businesses, including the Stejar Foundation, Capitala Conservării, ProPark Foundation.

- *WWF*

Working since 2006 to protect the wild environment of the Carpathian Mountains and the Danube (protected areas, forests, brown bears, bison, the Danube Delta and sturgeon habitats), WWF is based in Bucharest, but also operates in other cities, including Braşov. Their inclusion in the future FPN comes from their active involvement in environmental education, through *the Program for Schools in Romania*. This program aims to catalyze legislative changes from local to national level through "green public procurement", aligning with the European Strategy: "Farm to Fork" (2020). The program's educational activities aim to improve the way

responsible public institutions purchase food for educational establishments. The aim is to prioritize sourcing from short food chains (local producers) with seasonal produce and sustainable production practices. WWF maintains close partnerships with public bodies such as the Ministry of the Environment and non-governmental associations such as Bankwatch Romania, 2Celsius, Greenpeace Romania, Agent Green, Code4Romania, Design Thinking Society and Braşov Municipality, among others.

- *The Hărman Farm* is an initiative led by a small local farmer located in the peri-urban region of the city of Braşov, specifically in the town of Hărman. This farmer produces organic products on both a vegetable farm and an animal farm, which are then sold locally in the urban area. The unique aspect of this initiative is the direct delivery of products to urban customers, eliminating middlemen. This delivery takes place directly at the customer's home or at a city market in Braşov, ensuring that the products are constantly fresh and delivered through a (very) short food chain, scheduled by prior appointment. Within a potential FPN, the role of Ferma Harman as an SME would serve as a model of good practices, with the aim of replicating the model in the entire Braşov county. Ferma Harman maintains its main ties with customers who are residents of the city of Braşov. Braşov City Hall actively supports such initiatives and expands the opportunity for these businesses to present their products without incurring rental fees for stalls in agro-food markets.
- *Breasla Cârciumarilor* is a network of restaurants, cafes, bistros and fast food in Braşov County. It promotes short food chains and relies on close relationships with a network of local agricultural producers who supply them with high-quality raw materials. The main role in the future of the FPN is to encourage food policies that promote this type of short food chain initiatives. The Tavern Guild collaborates with farmers, public catering units and customers. It is also involved in charity events, festivals and events to promote high quality food, organized by the town hall and other civil society representatives.

## CONCLUSIONS

Integrated food policies for sustainable development require a holistic approach to the food system, with actors from a complex societal helix consisting of farmers, processors, transporters, education, NGOs, government.

The governing component of the social helix (municipalities, town halls, prefectures) must assume the leadership role in the design and promotion of food policies through integrated food policy networks.

The power relationship between the cities and the mountain countryside must be managed correctly in a way that allows the development of the mountain countryside in all its aspects, economic, social, cultural.

The implementation of new models of cooperation between all actors of the food system requires an approach at the level of development strategies of the Braşov mountain area with the identification of development policies with collateral benefits, strong urban-rural links, social inclusion and territorial connection.

The food transition towards sustainable and healthy products for consumers according to the new paradigm: "Menu for the planet" implies a pact for the food transition as a component of a new integrated food policy of Romania, based on five main challenges: health and nutrition; packaging; sustainable and ecological agriculture; responsible communication and transparency.

## BIBLIOGRAPHY

- Boussard, J.M.**, 1987. *Economie de l'agriculture*, Paris, Economica, 310 p.
- Charvet, J.P.**, 1987. *Le world food disorder, surplus et pénuries : le scandale*, Paris, Hatier, 265 p.
- Charvet, J.P.**, 1988. *La guerre du blé*, Paris, Economica, 220 p.
- CEGET-CNRS, MSA-ORSTOM**, 1987. *Terres, comptoirs et silos, des systemes de production aux politiques alimentaires*, Paris, ORSTOM (colloques et seminaries), 263 p. (see notably: Courade pp. 33–74, Labonne pp. 137–149 and Kennel-Torres pp. 235–256).
- Chopra, R.N.**, 1981. *Evolution of Food Policy in India*, Delhi, Macmillan India Ltd, 322 p.
- Derek Byerlee, T.S., Jayne and Robert J. Myers**, "Managing food price risks and instability in a liberalizing market environment: Overview and policy options", *Food Policy*, vol. 31, no. 4, 2006, p. 275–287.
- Duglio, S.; Salotti, G.; Mascadri, G.**, Conditions for Operating in Marginal Mountain Areas: The Local Farmer's Perspective. *Societies* 2023, 13, 107. <https://doi.org/10.3390/soc13050107>
- Fischer, G., Frohberg, K., Keyzer, M.A. et Parikh, K.S.**, *Linked National Models: A Tool for International Policy Analysis*, The Netherlands, Kluwer Academic Publishers, 1988 (ISBN 978-9024737345)
- Flury, Christian & Huber, Robert & Tasser, Erich.** (2013). Future of Mountain Agriculture in the Alps. 10.1007/978-3-642-33584-6\_8.
- Gruia, R.**, 2003. The basics of management science in food engineering, Ed. Universitatii Transilvania Brasov ISBN 973-635-154-8, 187 p.
- Gruia, R.**, 2018. The scientific evolution of gastronomy within the food act, Clarion Braşov Publishing House ISBN 978-606-94470-3-1, 163 p.
- Le Coz Jean, Louis Malassis**, *Economie agri-alimentaire*, III. L'Économie mondiale par Louis Malassis et Martine Padilla. In: *Annales de Géographie*, vol. 97, n°540, 1988. pp. 214–215.
- Perlik, Manfred** (2019). The Spatial and Economic Transformation of Mountain Regions – Landscapes as Commodities. 10.4324/9781315768366.
- Radu Rey**, A vision of sustainable development – mountain – focused on the valorization of quality "mountain products". The increase in the importance of mountain areas in the post-coronavirus situation", edited by the Romanian Academy, Department of Economic, Legal and Sociology Sciences, "Costin C. Kirişescu" National Institute of Economic Research/mountain economy center, "ce-mont" Vatra Dornei, 2020. [https://academiaromana.ro/SARS-CoV-2/doc/d23-Dezvoltare\\_sustenabila\\_montana.pdf](https://academiaromana.ro/SARS-CoV-2/doc/d23-Dezvoltare_sustenabila_montana.pdf)
- Scott Slater, Phillip Baker, Mark Lawrence**, An analysis of the transformative potential of major food system report recommendations, *Global Food Security*, Volume 32, 2022, 100610, ISSN 2211-9124.  
<https://www.fao.org/publications/card/en/c/CA2079EN/>