Agriculture and Public Goods

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The Role of Collective Action

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From a centralistic, technocratic perspective a landscape of local and regional institutions which were set up to deal with local problems are often regarded as “chaotic”. But this labeling is wrong. In fact, the capacity of associations set up by responsible citizens to find solutions for real problems is outstanding and more human.

Elinor Ostrom
(Nobel Prize Lecture, 2009)

Introduction

The public support to agriculture is increasingly under scrutiny from governments, academics, policy analysts, NGOs and producers/organizations. In particular, at the EU level, the debate on the future orientation of the Common Agricultural Policy (CAP) is increasingly shaped by the role of agriculture in providing public goods, and there is a broad consensus that this approach will be particularly relevant in legitimating the EU policy intervention in agriculture in the future.

During the last decade, an increasingly number of studies have analyzed the complex relationships between agriculture and public goods, describing all the positive or negative effects (externalities) associated with agriculture for which markets are absent.

The classifications of public goods associated to agriculture usually identify two main categories: environmental goods and non-environmental goods (or social goods). In the first category are placed those public goods closely related to environmental externalities, such as farmland biodiversity, water availability and quality, resilience to flooding and fire, climate stability (mainly carbon storage and reducing greenhouse gas emission), agricultural landscape. In the second category are placed those public goods more related to the social dimension of agricultural activities, such as farm animal welfare and health, rural vitality and food security.

From a theoretical perspective, the provision of public goods and the provision of positive environmental externalities through agriculture have been acknowledged by the concept of multifunctional agriculture. The well-known OECD's (2001) working definition of multifunctional agriculture includes two core elements that are particularly relevant for the public goods debate, both in terms of theoretical development and policy definition. The OECD acknowledges 'the existence of multiple commodity and non-commodity outputs that are jointly produced by agriculture and the fact that some of the non-commodity outputs exhibit the characteristics of externalities or public goods, with the result that markets for these goods do not exist or function poorly'.

Thus, multifunctionality has represented the main conceptual framework that has been used, in both the institutional and academic debate, to describe the public goods objectives that have been pursued through the EU agricultural policies, especially during the last decade.

In order to incentivize the multifunctional role of agriculture and to overcome the market failures caused by public goods and externalities associated to the primary

sector, a broad set of agri-environmental policies are currently in place, based on environmental standards and regulation, taxes, payments, tradable permit schemes, etc.

An increasing number of scholars are analyzing the effectiveness of these measures, while other studies focus on the proposals on how to re-orient agricultural policies to increase their efficiency and effectiveness in providing public goods. All these studies show that no single instrument can achieve all the public goods objectives, but in many cases policy mixes are needed in order to combine instruments that complement each other.

At the same time the literature shows that in many cases the policy tools implemented to date have been largely inadequate to provide agri-environmental public goods at the required scale, by acknowledging the need of carrying out additional theoretical and empirical researches on the relations between agricultural and rural development policies and the provision of agri-environmental public goods.

It may be also observed that, in this academic and institutional debate, one of the more understudied issues is the role of collective action for the provision of agri-environmental public goods.

Indeed, while the many policy tools related to public goods associated with agriculture have mainly focused on individual farms rather than on collective action, in many cases it is evident that in order to provide effectively agri-environmental public goods such as biodiversity and landscape a collective approach is necessary, with a joint involvement of farmers and of other rural stakeholders in the same area.

It may be also observed that the majority of studies related to natural resources and collective action are mainly based on the management of Common Pool Resources (CPRs) in developing countries, while few studies are focused on general collective action theory or on collective action for agri-environmental public goods in developed countries.

At the EU level, for example, it is not clear to what extent collective action could be taken into consideration as a valuable alternative to market or state regulation in contributing to the provision of environmental public goods associated with agriculture, and to what extent it is possible to design and implement agricultural policies that incorporate a collective and collaborative approach between different stakeholders in rural areas.

The aim of this book is to analyze the role of collective action in the provision of agri-environmental public goods, and in reducing environmental externalities through agriculture. In addition, the book aims at proving policy recommendations regarding agri-environmental strategies that, especially in the context of the EU policies, could be based on these collective approaches.

Could collective action be an important driver of workable solutions regarding the provision of agri-environmental public goods through agriculture? Which are the main drivers that stimulate the participation of farmers into collective action for public goods? How can government stimulate collective action? At which level of government collective action can it be better stimulated? What kinds of policies are necessary to promote collective action?

The book aims at addressing these questions by exploring, through participatory methods, two case studies of collective action for the provision of agri-environmental public goods that have been recently developed in Central Italy.

The in-depth analysis of these case studies was completed with an extensive literature review, in order to contribute some insights to the theoretical development on the role of collective action for the public goods associated to agriculture. Indeed, as observed above, this argument, at least in the context of developed countries, is largely unexplored.

The book is divided into seven chapters.

The first chapter describes the theoretical approach regarding the definition and provision of public goods. This theoretical approach, rooted in institutional economics, is then applied to the relation between agriculture and the associated public goods and externalities. The chapter describes the different approaches to multifunctional agriculture as well as the type of analytical framework needed to address the public goods agenda in a policy context. It is shown how the different approaches in the notion of multifunctionality have different implications in terms of policy development and policy implementation. This analysis critically assesses the most conventional scientific formulations for approaching multifunctionality, based on neoclassical economics, by showing how this approach provides only partial and limited insights into possible trajectories of the public intervention in agriculture. It is then shown that the conventional approach has usually a narrow focus on the policy instruments needed to incentivize multifunctional activities at farm level, while a 'wider' approach on multifunctionality, rooted in institutional economics, allows the exploration of innovative policy tools and institutional arrangements that may be effective in providing public goods at a territorial scale.

On the basis of this theoretical approach, chapter two focuses on the definitions, role and characteristics of collective action. A very relevant issue to consider when analyzing the dynamics of collective action is what type of organization has developed such action, and this section provides a detailed description of the main institutional arrangements that may favour the development of grass roots collective action aimed at increasing the provision of public goods. It is argued that some innovative institutional arrangements based on mixed private-public solutions, such as co-production and co-management, may represent effective territorial strategies to promote and support collective action. The analysis then is shifted towards the new structure of the agricultural knowledge and innovation systems in agriculture necessary to favour the implementation of collective strategies aimed at providing public goods.

Chapter three provides a review of examples of collective agri-environmental initiatives that have been developed in different contexts, by showing their relevance in the current policy and academic debate. The description of these strategies provides some insights on the potentialities and barriers to implementing collaborative agri-environmental actions in different contexts. The final part of the chapter focuses on the main policy and institutional challenges for developing and supporting grass roots collective actions for public goods by providing a short overview of the Italian case studies that are analyzed more in depth in chapters four and chapter five.

Chapter four describes the collective action related to the ‘Custody of the Territory’ project, an initiative promoted by a territorial agency of a mountain area of Tuscany (‘Media Valle del Serchio’) which set an agreement with local farmers for co-production of some environmental services such as the cleaning of rivers, riverbeds, rivers banks and canals. This collective action shows how the relations between farming activities and environmental services could be addressed at a territorial level, which resources are mobilized, what type of information is exchanged and what outcomes are reached. Finally this case study shows how social learning and co-production of knowledge (amongst farmers, institutions, technicians, and citizens) are very important issues for a collective provision of environmental services.

Chapter five focuses on the innovative and collective approach to agri-environmental action which was experienced in the Valdaso area (Marche region), where a group of farmers started a grass roots initiative to adopt integrated agriculture at a territorial scale with the objective of protecting water and soils from pesticide and nitrate pollution. This collective action was supported by the regional and provincial authorities, which settled a territorial agri-environmental agreement financed by the regional Rural Development Programme. The case study shows that farmers’ collective action may play a significant role in controlling negative externalities from agriculture, especially if local institutions positively influence collective decision making behaviors, by structuring a range of incentives, capacity building programs and technical assistance to align individual and group interests and, above all, private and public goods objectives. The description of this initiative allowed me to explore, in the last section of the chapter, how a collective approach to agri-environmental action could be better embedded and institutionalized in the current political settings.

Chapter six summarizes the findings of chapters four and five and provides a more detailed theoretical discussion on the role of collective action in the provision of agri-environmental public goods. In this chapter the policy implications of the main results are discussed, also in the light of the current debate on the policy and institutional innovation needed to re-orient the EU Common Agricultural Policy towards a more effective provision of public goods in rural areas.

Chapter seven draws some conclusions regarding the role of collective action in agriculture, together with some suggestions for further research.

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List of Abbreviations

AEA	Agri-Environmental Agreement
AES	Agri-environmental Schemes
AIS	Agriculture Innovation System
AKS	Agricultural Knowledge System
ASSAM	Agenzia Servizi Settore Agroalimentare delle Marche
CAP	Common Agricultural Policy
CPRs	Common Pool Resources
DVL	Deutscher Verband für Landschaftspflege (German Association for Land-care)
GAEC	Good Agricultural and Environmental Condition
GT	Grounded Theory
ILDS	Integrated Local Development Strategies
IPM	Integrated Pest Management
ITP	Integrated Territorial Project
LAG	Local Action Group
LCA	Landcare Association
LRDP	Local Rural Development Plans
MD	Mating Disruption
NLP	National Landcare Programme
NVZ	Nitrate Vulnerable Zone
PRA	Participatory Rural Appraisal
PES	Payments for Environmental Services
RDP	Rural Development Plan
RRA	Rapid Rural Appraisal
UAA	Utilised Agricultural Area