

Recent Publication

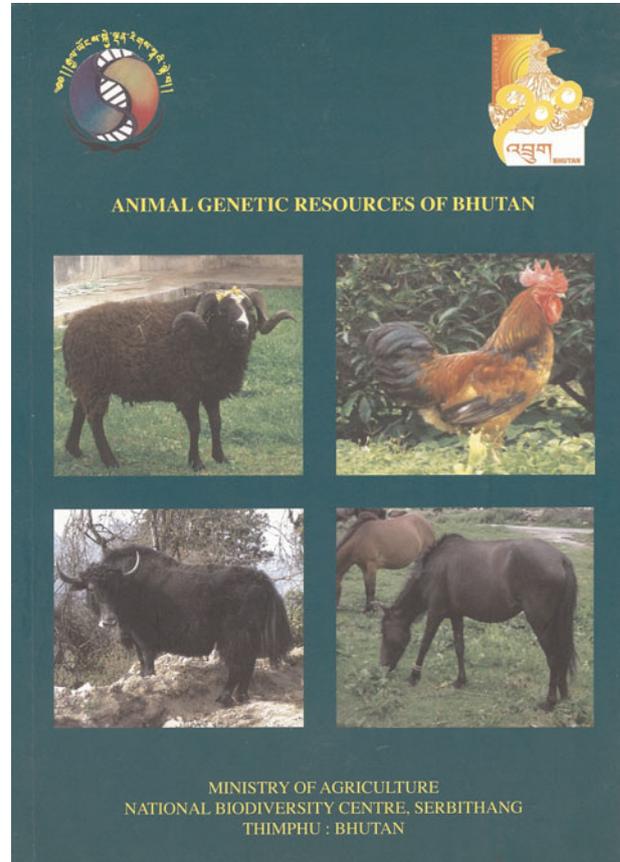
Animal genetic resources of Bhutan

National Biodiversity Centre, Serbithang. Published in 2008, pp. 51

Available at <http://www.nbc.gov.bt/publications>

doi:10.1017/S2078633611000117

This publication provides an overview of the animal genetic resources of Bhutan targeted at researchers, extension agents, farmers, students and the general public, with the aim of increasing awareness of livestock biodiversity and conservation. It is divided into seven chapters, each devoted to a particular species: nublang (traditional cattle breed of Bhutan); yak; sheep; goat; poultry (chickens); pig and horse. Each chapter has a standard format for easy reference: a short introduction is followed by the local and scientific names of species and breeds, photographs, descriptions of origin and population size, geographic distribution (map), utility, distinguishing features, physical parameters, genetic variation/diversity, management system, production performance, socio-cultural/religious and economic importance, selection environment, breeding structure, population trends and threats, conservation initiatives and conclusions. The book is intended as a precursor to more detailed documentation of the country's animal genetic resources, which will be presented in future publications.



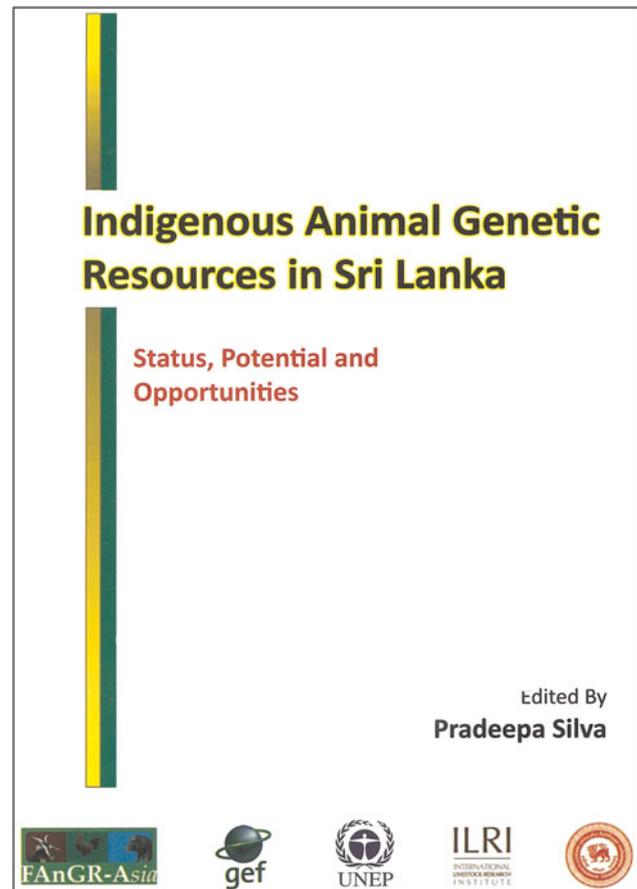
Recent Publication

Indigenous animal genetic resources of Sri Lanka. Status, potential and opportunities

Edited by Pradeepa Silva. A publication of the UNEP/GEF/ILRI – FAnGR Asia Project of Sri Lanka implemented by the University of Peradeniya, Sri Lanka. Published in 2010, 168 pp.
ISBN: 976-955-589-120-2

doi:10.1017/S2078633611000129

This publication sets out to evaluate the potential and prospects for utilizing Sri Lanka's indigenous animal genetic resources by describing them in the context of their physical, socio-economic, legal and policy contexts. The first chapter provides an introduction to the country's animal genetic resources, providing an overview of their origins and distribution, production systems, population trends and risks. This is followed by a description of the country's agro-ecology, focusing on climate, natural resources and land use. The next chapter reviews the potential for marketing products from indigenous animals as a basis for sustainable use, considering both marketing structures and consumer demand for various types of product. Chapter 5 describes national policy and legal frameworks affecting the management of animal genetic resources and provides a list of recommendations on how these frameworks could be improved. Chapter 6 describes the state of capacity to manage Sri Lanka's animal genetic resources and indicates where capacity-building efforts are required.



Recent Publication

Rare breeds and varieties of Greece Atlas 2010. Synonyms, occurrence, description of rare breeds and varieties in Greece

W. Kugler

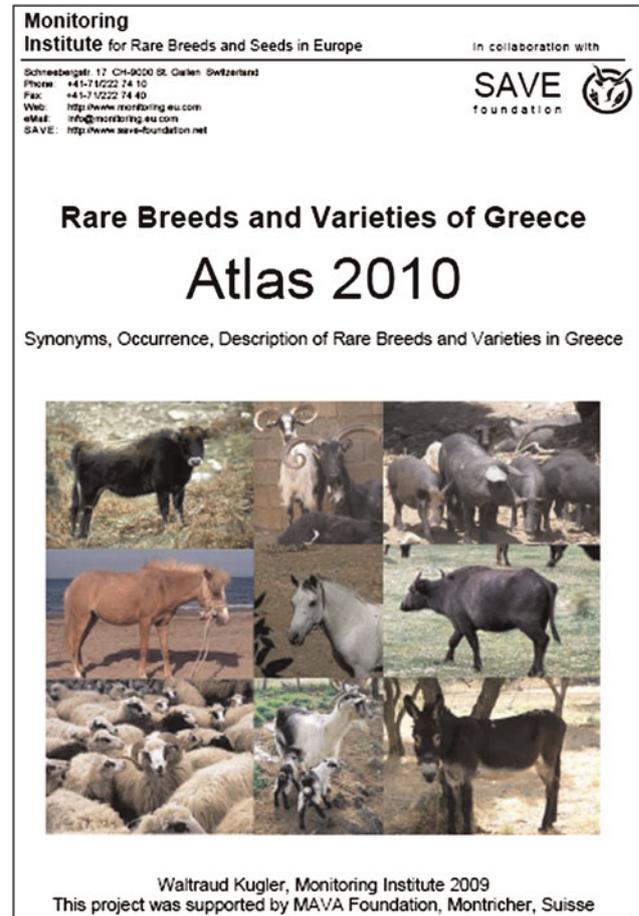
Monitoring Institute for Rare Breeds and Seeds in Europe, Switzerland

Published in 2010, pp. 129

Available at http://www.agrobiodiversity.net/greece/PDF/Breedatlas_Greece_FINAL.pdf

doi:10.1017/S2078633611000130

The objective of this publication is to serve as a basis for further conservation work at national and private levels and to raise awareness among all stakeholders. In a country like Greece, with varied topography and climate, one expects great diversity in livestock as a result of their adaptation to these conditions. The book documents information available on one breed/variety of buffalo, 37 of cattle, 13 of chickens, 4 of donkeys, 39 of goats, 20 of horses, 6 of pigs and 46 of sheep, mostly with photos. It lists breeds' risk statuses, based on the following six categories: not at risk, vulnerable, critical, endangered, unknown or extinct. Generally, the category with highest frequency is "unknown" (37%) followed by "endangered" and "critical" (17% each). The proportion of extinct breeds/varieties is highest in cattle (41% of all listed cattle breeds/varieties) while the highest percentages of "unknown" breeds are in chickens (69% of all listed chicken breeds) and goats (68% of all listed goat breeds/varieties). Other information includes official acceptance, population size, colour and other phenotypic traits, performance traits, and area of distribution. Species and breeds within species are arranged in alphabetical order



for easy reference. Not all breeds/varieties documented are rare, however. The Karagouniko sheep, for example, has a population of 220 000.

Recent Publication

Razas Ganaderas Españolas Porcinas (Spanish pig breeds)

J.L. Ruiz Tena and C. Barba Capote, FEAGAS,
Ministerio de Medio Ambiente, y Medio Rural y Marino (Eds.)
(In Spanish)
Published in 2010,
ISBN 978-84-491-0882-2
pp.171

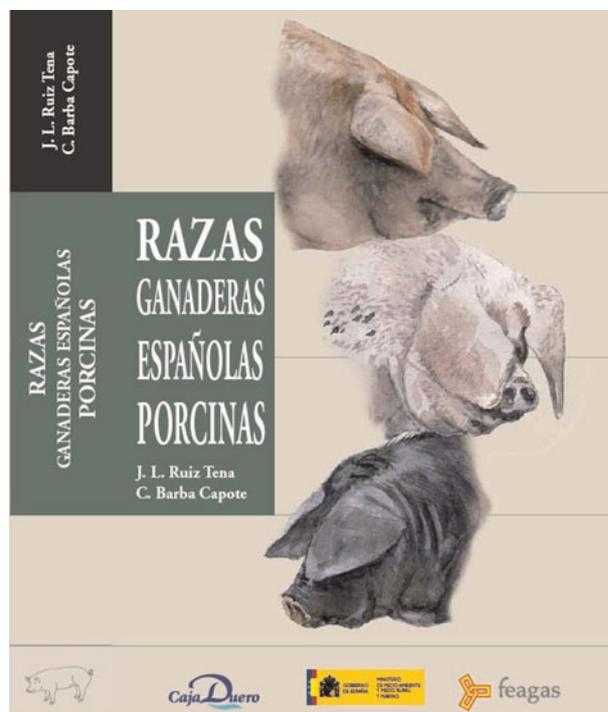
doi:10.1017/S2078633611000142

En la década de los ochenta el Ministerio de Agricultura editó los catálogos de las razas autóctonas españolas de la especie bovina, ovina y caprina. Estas publicaciones tuvieron un gran éxito entre los profesionales relacionados con la producción ganadera. Después de 30 años, la Federación Española de Asociaciones de Ganado Selecto (FEAGAS), junto con el Ministerio de Medio Ambiente y Medio Rural y Marino, ha editado, en la línea de lo desarrollado para estas otras especie, una obra centrada en la especie porcina que también ha tenido una excelente acogida en el sector.

Esta publicación, en tapa dura, con 125 fotografías a color, 16 mapas, dibujos, gráficos y tablas, describe la situación tanto de las razas porcinas autóctonas como de las razas que se introdujeron y explotaron en España durante más de 40 años, y que ahora son partes de nuestro patrimonio genético.

El objetivo de esta publicación es describir la situación actual de cada raza en el contexto de su propio entorno y el sistema de producción. Incluyendo datos sobre características morfológicas y productivas, así como del origen, los sistemas de producción, la distribución en el país y los programas de cría aplicados.

Es necesario subrayar el importante papel que las razas autóctonas tradicionalmente han desempeñado en España, y el todavía mayor que pueden desempeñar hoy en día, tanto desde el punto de vista económico como social y medioambiental, dando lugar a una gran variedad



de productos de calidad, contribuyendo al desarrollo rural de una manera sostenible.

FEAGAS, con la publicación de este nuevo tratado de zootecnia, en el que ha contado con la colaboración de las diferentes Asociaciones de Criadores, continua cumpliendo con el compromiso adquirido de editar una colección de libros de las diferentes especies de interés, presentes en la Cabaña Ganadera Española.

Se trata del cuarto libro de esta serie, precedido de otras tres publicaciones, una centrada en la especie bovina, otra en la ovina y otra en la caprina, que continuará con el proyecto, ya puesto en marcha, sobre la especie equina.

Recent Publication

Local cattle breeds in Europe. Development of policies and strategies for self-sustaining breeds

Edited by S.J. Hiemstra, Y. de Haas, A. Mäki-Tanila & G. Gandini

Wageningen Academic Publishers

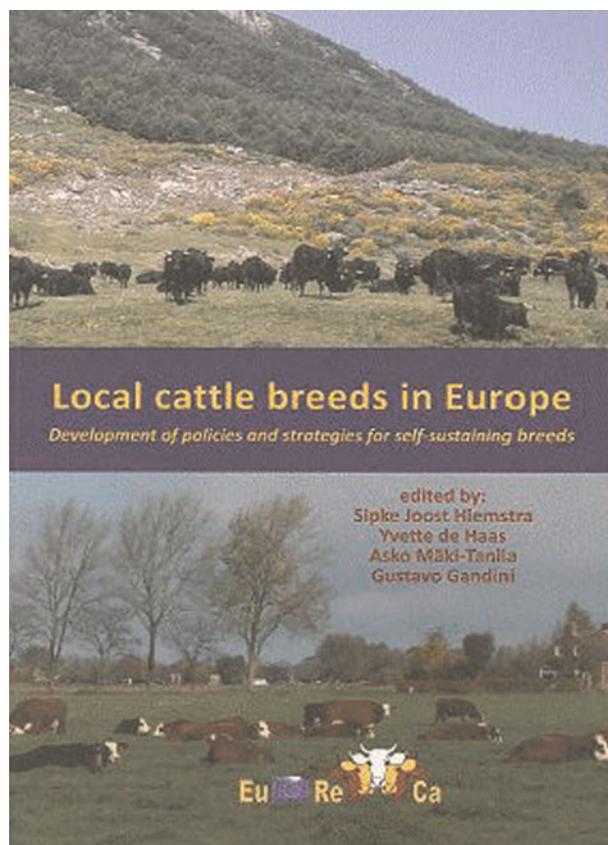
Published in 2010, pp. 154.

ISBN: 978-90-8686-144-6

e-ISBN: 978-90-8686-697-7

doi:10.1017/S2078633611000154

This publication is an outcome of the EURECA project – “Towards self-sustainability of EUropean, REgional, CAattle breeds” – undertaken by a consortium of 10 European partners (10 countries) between 2007 and 2010. The project sought to answer the question: “How can we positively influence the future of our local cattle breeds in Europe?” The approach taken involved collecting fifteen breed cases studies – history, status and development – across eight European countries. Sources of information included farmer interviews and the perceptions of other stakeholders and experts including National Coordinators for the Management of Animal Genetic Resources. Strengths, weaknesses, opportunities and threats (SWOT) were analysed for each breed. For some breeds, strategic opportunities were identified and the project partners interacted with relevant stakeholders in order to develop or strengthen the future prospects of the breeds in question. The project also studied similarities and differences among national cryoconservation programmes, and reviewed available methodologies and software for assessing the management of genetic variation within populations. The book’s eight chapters cover: an introduction to the project and its methods; trends in cattle diversity and production in Europe; the state of local cattle breeds in Europe – covering risk status and the state of management; differences and similarities across local cattle farming in Europe – including farm characteristics, farmer



profiles and SWOT analyses; the role and state of cryoconservation in local cattle breeds – including organizational aspects, sampling strategies and factors affecting management decisions; assessment and management of genetic variation; decision-making tools for the development of breeding strategies; and recommendations for the management of local cattle breeds in Europe. Text boxes present short descriptions of the history and management of the breeds studied and the outcomes of the respective SWOT analyses.

Recent Publication

Linking people, places and products. A guide for promoting quality linked to geographical origin and sustainable Geographical Indications

E. Vandecastelaere, F. Arfini, G. Belletti and A. Maescotti
FAO/SINER-GI

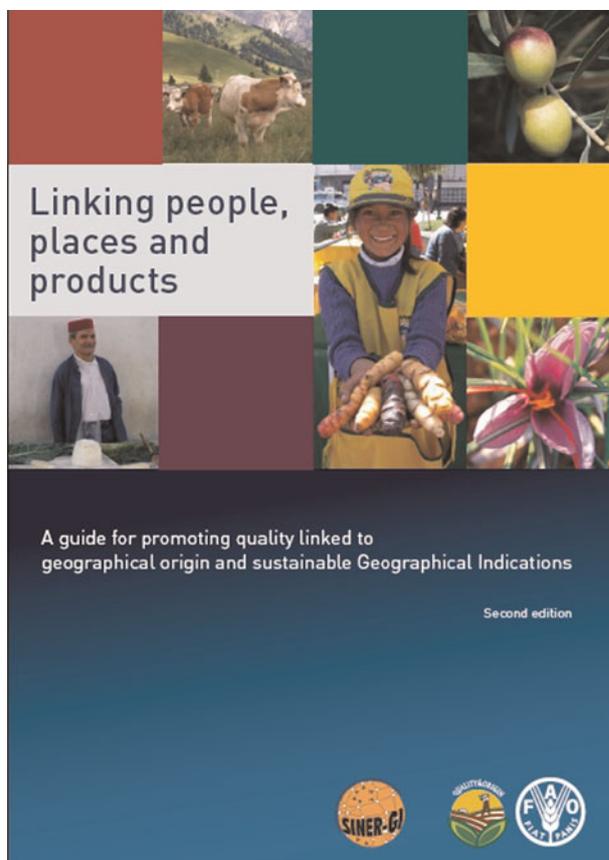
Published in 2009, pp. 194

ISBN 978-92-106374-3

Available at <http://www.fao.org/docrep/012/i1057e/i1057e00.htm>

doi:10.1017/S2078633611000166

This publication focuses on the use of geographical indications (GI) as a means of promoting links between people, places and agrifood products in support of sustainable rural development. Specific objectives are to explain the GI concept, raise awareness regarding the potential of origin-linked products in rural development, and facilitate implementation of GI schemes at local level. The guide provides a conceptual framework, concrete examples and methodologies for use by those interested in implementing such schemes. The main target audience includes practitioners, rural development specialists from the public or private sectors, representatives of value chains, policy makers, rural community leaders and trainers. It is argued that an origin-linked product can become the pivotal point of a virtuous circle in which identification of the product is followed by qualification (means of distinguishing the product) and remuneration (marketing or public support for non-marketable benefits) lead to reproduction of the local resources that underpin production, and preservation of the agrifood system and related social networks – thus contributing to economic, sociocultural and environmental sustainability. At each phase of the virtuous circle, local actions need to be reinforced by appropriate public policies that provide an enabling institutional framework. The guide is structured around these five elements (identification, qualification, remuneration, reproduction and public policies) with a chapter dedicated to each. More than 40 case studies are presented. Several examples involving animal



products are featured: Chivito Criollo del Norte goat meat (Argentina); Livno cheese (Bosnia-Herzegovina); Chontaleño cheese (Nicaragua); Cotija cheese (Mexico); Pampa Gaúcho da Campanha Meridional meat (Brazil); Turrialba cheese (Costa Rica); Lardo di Colonnata pork fat (Italy); Jinhua ham (China); Comté cheese (France); Gruyère cheese (Switzerland); Parmigiano Reggiano cheese (Italy); Parma ham (Italy) and ham of Uzice/Zlatibor (Serbia).

Recent Publication

Conservation biology for all

N.S. Sodhi and P.R. Ehrlich (eds.)

Oxford University Press

Published in 2011, pp. 344

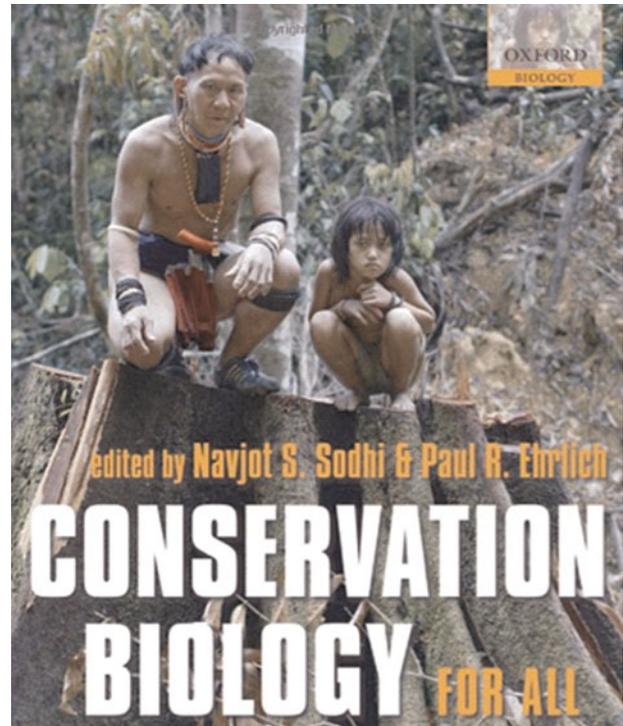
ISBN 978-0-19-955423-2 (hardback.)

ISBN 978-0-19-955424-9 (paperback.)

Available at <http://www.mongabay.com/conservation-biology-for-all.html>

doi:10.1017/S2078633611000178

This publication helps meet the obvious need for a book that deals with conservation biology as a science in its own right. The book deals with conservation generically, covering ecosystems, species, landscape, etc., but for instance it mentions little or nothing about gene banks, *in situ* or *ex situ* conservation. It contains 16 chapters written by 26 authors covering a wide range of related topics including historical background, theoretical aspects of conservation, factors leading to the decay of biodiversity, country experiences and advice on how to develop conservation actions. The book is relevant and quite useful to both undergraduate and graduate students as well as scientists, managers and personnel in non-governmental organizations. The book is freely available on the web.



Recent Publication

Poverty and Biodiversity Conservation

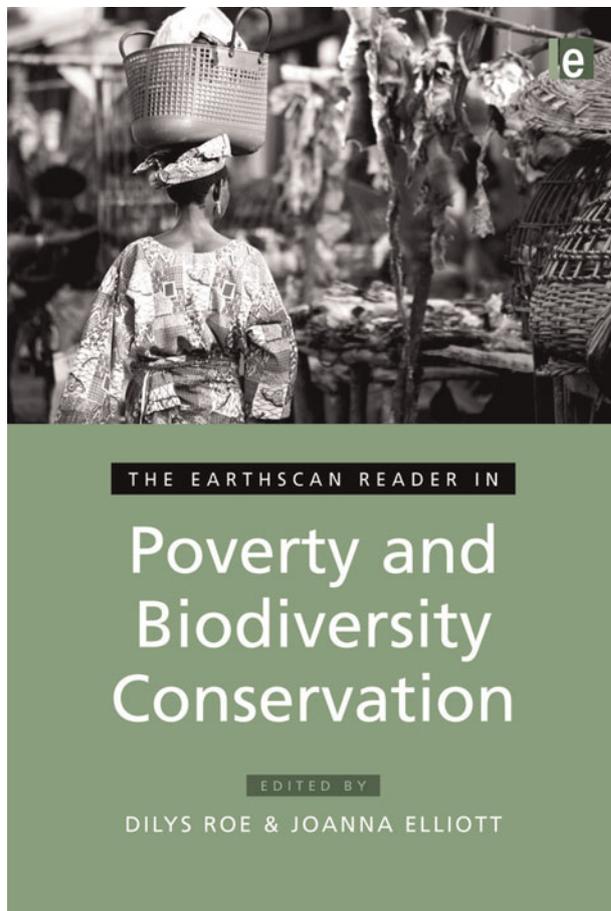
Edited by Dilys Roe & Joanna Elliott. 2010.

Earthscan, London. 396pp.

ISBN 978-1-84407-842-4/1

doi:10.1017/S207863361100018X

The editors have drawn together a galaxy of authors who bring expertise on all aspects of biodiversity loss, conservation, poverty and its alleviation. In fact the book may be regarded as a manual on these two subjects with a wealth of references, experiences and perspectives. The main thesis of the book is that both biodiversity and poverty are global problems that are regarded as separate topics and addressed by policies and programmes operated by people and institutes that do not have contact with each other. The editors argue that the loss in biodiversity and the obscene existence of extensive poverty are major global problems for which better solutions can be found if they are integrated. In fact some of the causes of biodiversity loss are the same as some of those causing poverty. They derive from the mono-lithic, mono-cultural and mono-selfish system that drives the use of biodiversity in the interests of a small capital rich section of the world. This model gains more for those who are already rich by the use of minimal diversity in natural resources and by replacing labour with capital. Large-scale, uniform production and use of limited, patented biological diversity is more profitable than coping with great diversity. The scope of the book as a review of the two topics is enormous. There are chapters on biodiversity and poverty, conservation policy and practice; NGO's and governments, ecosystems and adaptation, indigenous people and those who exploit them, anthropology and social science, forests and protected areas, international conventions and world trade, livestock and fisheries, landscapes, people and power. In addition the issue of climate change is seen as a complicating factor that cannot be ignored and may well be helped by a new vital partnership between programmes of biodiversity conservation and poverty alleviation. The book thrusts towards the proposed marriage of Conservation-Poverty Partnerships in order to find mutual benefits and solutions that otherwise



either ignore or conflict with each other. The book is perhaps stronger on description and diagnosis than on specific ways of such partnerships but the argument is so well supported by the facts that it merits serious consideration and new dialogue between partners. The proposal is of specific interest to livestock and animal genetic resources since indigenous breeds that are often owned by the poor are under threat and need conservation. It has long been recognized that well-organized situ conservation of indigenous livestock breeds can bring economic benefits to poor livestock keepers.

Recent Publication

The meat crisis: developing more sustainable production and consumption

Edited by J. D'Silva and J. Webster

Earthscan

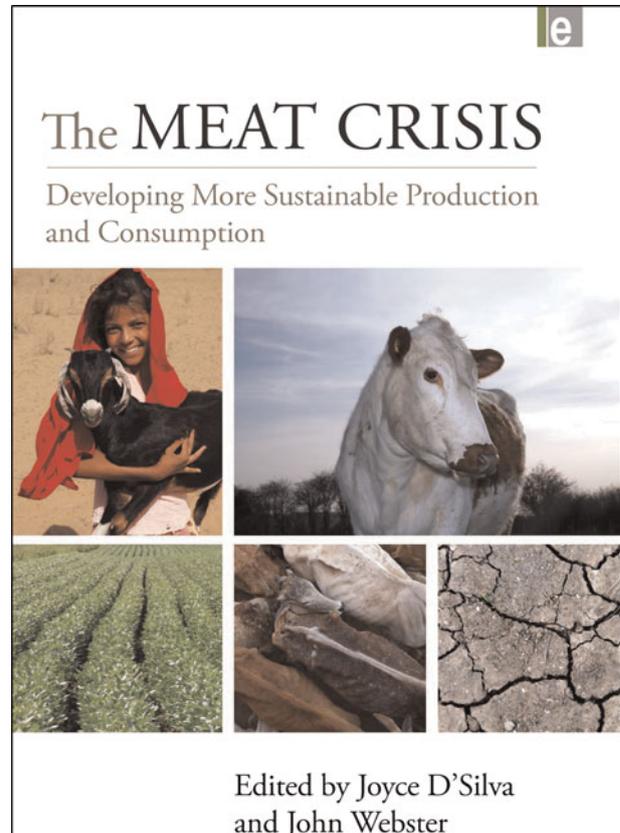
Published in 2010, pp. 328

eBook ISBN 13: 9781849776561

Print ISBN 13: 9781844079025

doi:10.1017/S2078633611000191

The book comes in 17 chapters in five parts covering: the impacts of animal farming on the environment; farming practices and animal welfare; the implications of meat production for human health; ethical and religious approaches to animal foods; and devising farming and food policies for a sustainable future. Chapters are contributed by 25 authors well versed in agriculture, human and animal health, environment, socio-economics and related topics. The book propounds its pivotal thesis that natural resources are not unlimited and that with current increases in world population and per capita average consumption of animal products, both production and consumption of animal products, including poultry and fish, are becoming unsustainable. Over and over again, the book points out that the overconsumption of animal products negatively impacts human health, animal health and the health of the earth. A main culprit for this trend, the book argues, is the domination of corporate farming (factory farms) and the disappearance of “family farming” leading to industrialization and production intensification (*unsustainable*, reviewer). It is justly pointed out that corporate agriculture has been a main factor in shrinking diversity in genetic resources and ecosystems. It explores the complex interplay between economic, social, cultural and moral issues (e.g. animal welfare). It highlights the disparity between per capita consumption of animal products in the high-income countries (200–300grams/day) and low-income countries (e.g. 20–40 grams/day in sub-Saharan Africa). The book advises that “In order to substantially reduce greenhouse gas emission from food production and to preserve natural and agricultural biodiversity, policies that separately address the demand and the supply sides of food system will be required. Taxes on animal



food, and other policies that shift consumption patterns towards less greenhouse gas and land-demanding food will be crucial for reducing agricultural greenhouse gas emission as well as mitigating biodiversity losses related to the expansion of agriculture into natural ecosystem”. In some places in the book it is admitted that animal proteins are required for healthy human diet, but in some other places it enthusiastically states otherwise: “Industrial livestock policies are invariably playing on the widespread but incorrect belief that we need animal protein for healthy diet”. The motto of the book could be summarized as “If you eat less meat you would be healthier as would our planet” but a significant distinction must be made between these who overeat and those who cannot get enough.

Recent Publication

Protein, population, politics. How protein can be supplied sustainably in the 21st century

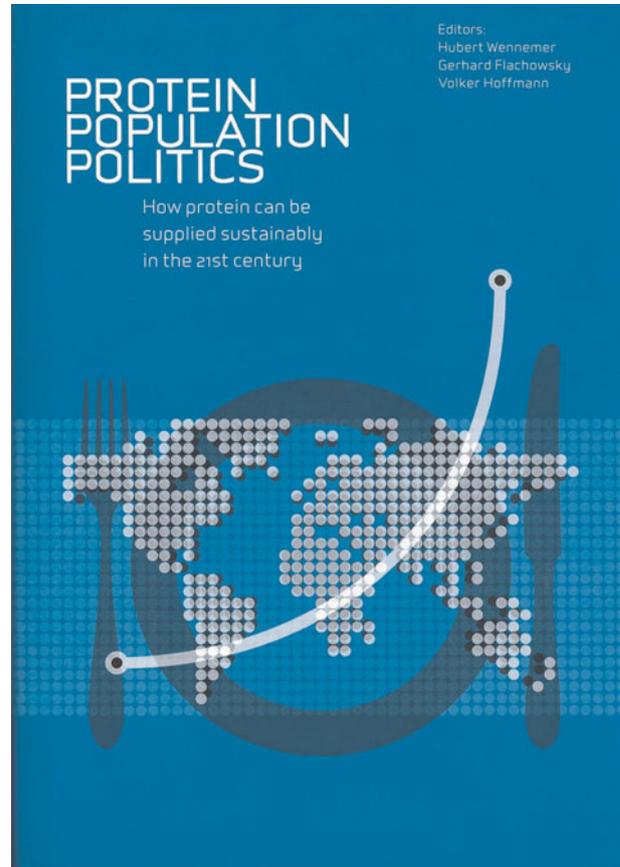
Edited by Hubert Wennemer, Gerhard Flachowsky and Volker Hoffmann

Degussa AG, German Federal Agriculture Research Center (FAL), Council for Tropical and Subtropical Agriculture (ATSAF)

Published in 2006, 160 pp

doi:10.1017/S2078633611000208

This book brings together a series of ten essays on the theme of protein supply for human consumption. Its origins lie in a symposium – “Protein, population politics” – organized in Berlin in 2002 by the German Federal Agriculture Research Center, Council for Tropical and Subtropical Agriculture and Degussa AG (a supplier of feed additives). All written in popular-science style, the catchily titled essays span the millennia from the evolutionary origins of the human species to the twenty-first century with its high-tech livestock and feed industries. The first essay – on the part played by meat in the transition from ape to human – is followed by a discussion of human population growth in relation to food supply and the maintenance of biodiversity. The focus then moves to a discussion of how livestock have shaped the world, from the earliest domestications of wild species, via the role of livestock in conquest and colonization, disease epidemiology and transformation of landscapes, to concerns about the environmental effects of livestock production; the essay ends with a discussion of the current use of livestock genetic diversity and the potential for future species domestications. This is followed by a look at how concerns about animal welfare have affected the livestock industry and a discussion of the concept of sustainable agriculture. Attention then shifts to international trade flows of live animals, meat and livestock feed and



to the issue of whether supplying feed for the world's livestock contributes to the problem of hunger among the world's poor. Next come discussions of fisheries and aquaculture and of non-meat protein sources such as fungi and algae. The final essay addresses the overall task of ensuring a sustainable supply of protein in the coming decades; attention is paid to social and policy developments as well as to the potential of technology.

Recent Publication

Foresight. The future of food and farming. Final project report

The Government Office for Science, London

Published in 2011. pp. 211

Available at <http://www.bis.gov.uk/assets/bispartners/foresight/docs/food-and-farming/11-546-future-of-food-and-farming-report.pdf>

doi:10.1017/S207863361100021X

This is the final report of the Foresight Global Food and Farming Futures Project, UK Government. The project aimed at investigating forces affecting the global food system between 2011 and 2050 and identifying the decisions that policy makers need to take today and after to ensure that a growing human population can be fed sustainably and equitably. The project has involved some 400 leading experts and stakeholders from about 35 low-, middle- and high-income countries across the world. In its 211 pages the report confers a sense of the need for urgent action in the global food system as diverse factors converge to impact demand, production and distribution of food over the next 40 years. These factors or “drivers for change” are the expected growth in the world human population; the likely increase in individuals’ incomes globally; competition for resources – mainly land, water and energy; the need to reduce greenhouse gas emissions; and adaptation to a changing climate. These drivers for change are interplaying in an increasingly globalized environment, exposing the food system to unprecedented economic, social and political pressures. The report stresses that much can be done today, with existing knowledge, to address food security through multiple approaches and sustainable intensification, but certainly not through the use of “a single or particular technology”. New technologies, e.g. GMOs, must not be excluded *a priori* on ethical or moral grounds, but due respect should be given to opposing views. The potential of appropriate new technology in overcoming problems in the food system is potentially very good for the poorest people in low-income



countries. That is why it is imperative to incorporate possible beneficiaries in decision-making at all stages of the development process. Agriculture can play a main role in improving food systems but agricultural research needs to be better funded and more focused, in the meantime supported by efficient extension to bring about sustainability in the global food system which at present is consuming the world’s natural resources at an unsustainable rate. While the report is mainly addressed to policy makers, it makes very useful reading for socio-economists, agricultural research administrators and environmentalists.

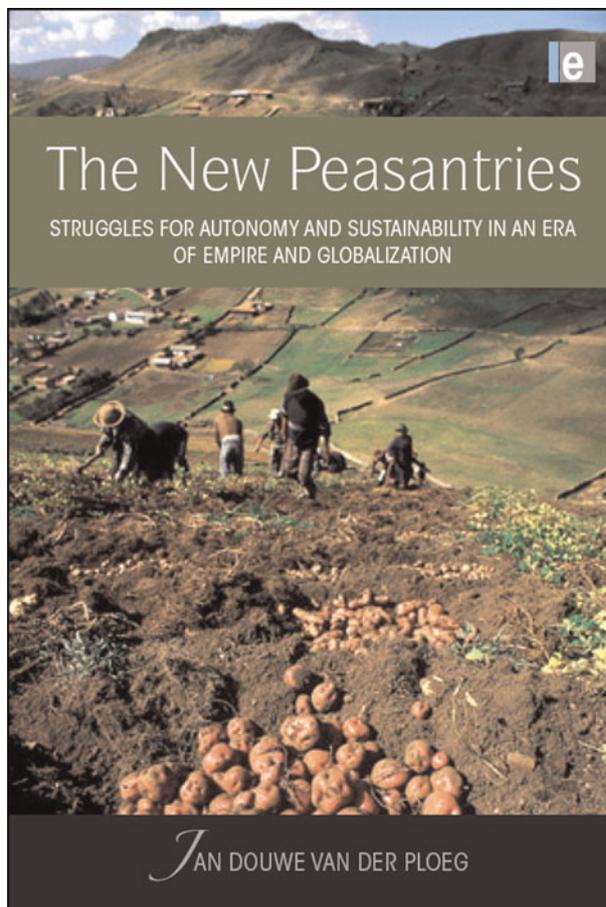
Recent Publication

The New Peasantries: Struggles for Autonomy and Sustainability in an Era of Empire and Globalization

Jan Douwe van der Ploeg. 2008.
Earthscan, London. 356pp.
ISBN 978-1-84407-558-4/882-0.

doi:10.1017/S2078633611000221

Today the focus on globalized, intensive agriculture as the only way to feed the world populations usually neglects both history and alternative options. The author points out that humans have fed themselves for millennia without the new food empire of global capitalism, scale and oil-based inputs. A high proportion of the rural populations of the world, which is where half the people live, still feed itself without such inputs. The author provides a valuable descriptive characterization of peasantries in the past with their strong emphasis upon the struggle for autonomy and he argues that they are still with us and are in fact increasing in number. In the past peasants struggled against hostile environments, climate and poverty to maintain their independence, culture, traditional agro-bioresources and livestock. Today they struggle for independence from the new food empire that attacks local economics, indigenous social systems and independence. The integration of peasants with their livestock is particularly important with resonances in cultural as well as economic aspects of life. The author thinks the present squeeze on peasant agriculture is brutal as industrialized farming makes no concessions and is incompatible with peasantry. He identifies three components of the present structures food production chain: capital rich, entrepreneurial and peasant. The author does not concede that the latter will disappear. Rather he provides an unusual perspective on the historic strengths of peasants and considers that they will continue to insist upon their own freedom. He draws examples from Peru, Italy and The Netherlands. Peasants have neither the economic means nor the inclination to join the capitalist model. Some of them may move into the category of entrepreneurs thus maintaining their independence. His advocacy is for the empowerment of peasants to enable them to maintain their historic independence in a globalized world by



improved use of their indigenous livestock and other local resources that are so well adapted to the environment and to their historic culture. In this he matches the view of the recent UN-IAASTD Report that advocates research to enhance historic local food production using indigenous resources. Local livestock with genetic adaptation have a large role to play in this scenario and have genetic variation to enable them to respond to modified methods. It may be that the peasants will be the survivors in the inevitable crash that will bring disorder to the large-scale global system. This is a courageous book offering hope from the past for the future.

Recent Publication

The economics of ecosystems and biodiversity: ecological and economic foundations

Edited by P. Kumar

Earthscan

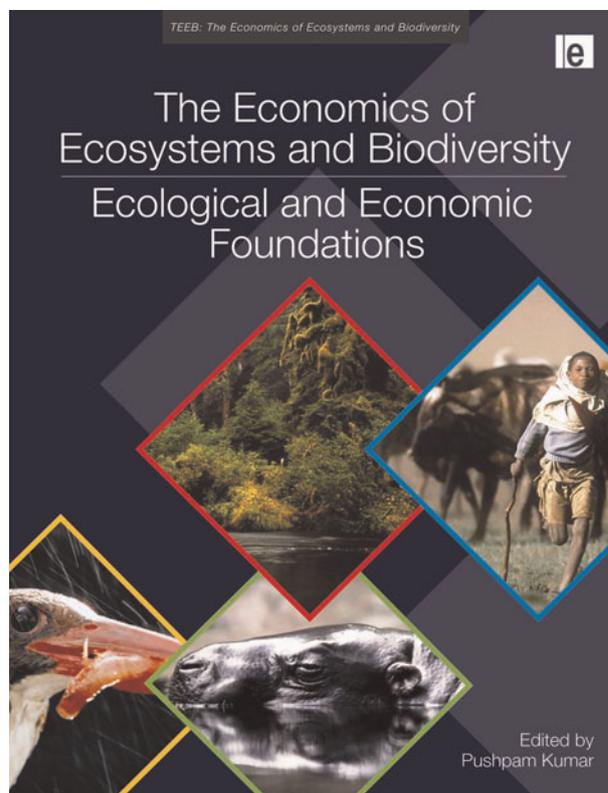
Published in 2010, pp. 451

Print ISBN: 9781849712125

ebook ISBN: 9781849775489

doi:10.1017/S2078633611000233

The Economics of Ecosystems and Biodiversity (TEEB) project was established with the aim of providing a comprehensive global assessment of the economics of biodiversity loss. Central to the analysis is the concept of ecosystem services: the various benefits that humans derive from well-functioning ecosystems and the biodiversity that contributes ecosystem function. Many of these services do not command any market price. Thus, markets provide insufficient incentives to maintain biodiversity and the consequences of its loss do not register in conventional economic projections. Policy-makers, used to basing their decisions largely on measurable economic outcomes, tend to underestimate the benefits that could be gained from taking action to prevent biodiversity loss. The TEEB project aimed, by showing how ecosystem services and biodiversity can be measured and valued, to provide a means of pushing biodiversity up the policy agenda. This first volume of output from the project presents the ecological and economic foundations of valuing ecosystems and biodiversity. It begins by discussing the principles underlying the conduct of ecosystem assessments that aim to value the services provided by these systems. This is followed by a closer look at the specific links between biodiversity and ecosystem services. Further chapters focus on the roles of measurement and indicators; the cultural context of



valuation; the economics of valuing ecosystem services and biodiversity (based on the concept of total economic value); and the various factors, including ethical issues, to be considered in establishing a discounting rate for an economic valuation. The final chapter considers lessons learned and linkages between valuation and national policies.

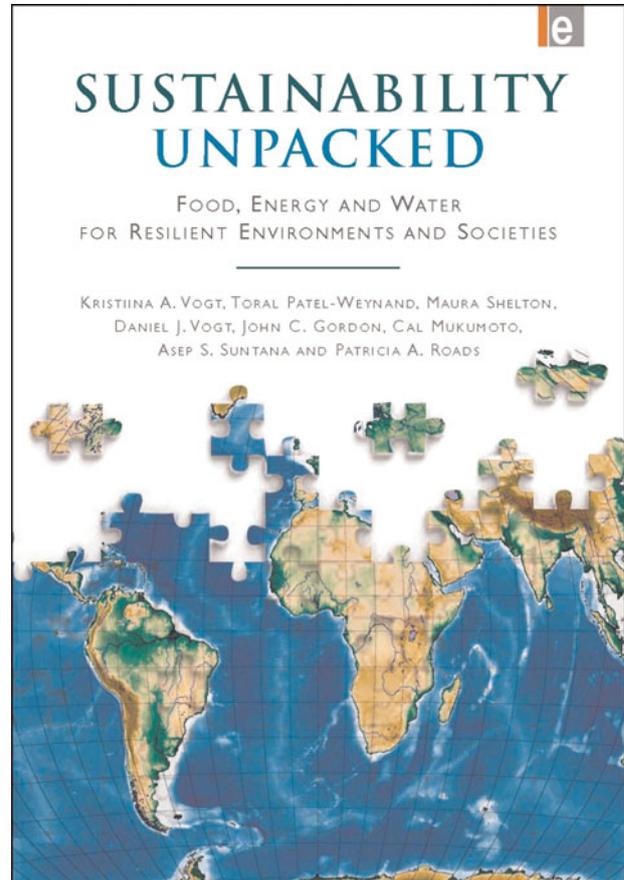
Recent Publication

Sustainability unpacked. Food, energy and water for resilient environments and societies

K.A. Vogt, T. Patel-Weynand, M. Shelton, D.J. Vogt, J.C. Gordon, C.T. Mukumoto, A.S. Suntana & P.A. Roads
Earthscan Published in 2010, pp. 305.
ISBN: 978-1-84407-900-1 hardback
ISBN: 978-1-84407-901-8 paperback

doi:10.1017/S2078633611000245

The premise of this book is that sustainable management of natural resources requires recognition of the interacting effects of social, ecological and economic factors, but that this “ecosystem thinking” is not the norm in policy-making or development interventions. Further, it is argued that although there are many recorded examples of practices that proved unsustainable and descriptions of how societies collapsed because of such practices, the lack of sustainability in these cases often arose from unique sets of circumstances that do not pertain elsewhere or at other times. The objective is to “unpack” the factors that influence sustainability and thereby draw lessons on how natural resources can be managed as a basis for building resilient societies. The approach taken involves analysis of various indices that have been developed to measure countries’ social and environmental performance. The management of energy, forests, soil and water across a range of countries at various levels of development is reviewed and their environmental and social impacts both locally and globally are assessed. The role of climate and soils as limiting factors for the productivity of any land are then factored into the analysis. Emphasis is given to the concept of “solar income” defined as “the annual increment of fixed carbon captured in agriculture and forestry (or other solar energy captured such as PV, wind or hydro)”. It is argued that sustainability in the long term requires a shift towards managing and using this solar



income rather than depleting “solar capital” (fossil fuels, forests, etc.). Emphasis is also given to the importance of “human capital”, i.e. the knowledge and skills needed to manage natural resources and adapt to environmental challenges. The final chapters of book are devoted to discussing how human and natural capitals can be managed and enhanced in the interests of sustainability.