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Sustainable Rural Development in Mountainous Regions with a Focus on Agriculture in the Tibet Autonomous Region

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Pema Gyamtsho, Nyima Tashi, Karl Kaiser,
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Sustainable Rural Development in Mountainous Regions with a Focus on Agriculture in the Tibet Autonomous Region

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Foreword

Tibet is no longer inaccessible to the outside world and has seen rapid socioeconomic development in the last two decades along with the other regions of the People's Republic of China. This has been, to a great extent, the result of the current quasi-market system called the 'responsibility system' ushered in by the government in the early 1980s to replace the communal system. However, Tibet still remains one of the poorest regions in China due to the harsh natural conditions as well as poor social and economic capital. Malnutrition among children, high maternal mortality, low income levels, and poor housing conditions are some of the common manifestations of poverty that prevail in rural areas. Lack of adequate access to basic needs, such as food, drinking water, and clothing, as well as to social services like health and education, is considered to be the main cause of poverty.

With the rapid growth of China's economy as a whole and its entry into the WTO in 2002, there has been salient interest and commitment from the Government of China to the development of the poorer southwestern provinces, including the Tibet Autonomous Region (TAR). The substantial investment that flowed to the region from both internal and external sources to develop Tibet into a market economy brought with it significant improvements in its economy as well as new challenges to its people and environment. Lhasa, the capital, has become a modern city, with all the trappings of an open-market economy, and it boasts a vibrant tourism industry. However, the economic benefits have been, by and large, confined to urban areas with most of the economic enterprises owned and operated by non-Tibetans. As a result, there is disparity between urban and rural areas, resulting in rural to urban migration, increasing unemployment among youth, and other social problems like drug abuse and crimes.

The aim of this conference was to review the progress made by Tibet in pursuing socioeconomic development in its rural mountain areas and to share experiences from other similar regions in order to identify suitable policies and strategies for pursuing sustainable development. It was held two years after the conference in Chengdu, which focused on poverty alleviation in mountain areas of China, wherein a specific recommendation was adopted to give priority to the TAR in this current conference. The Conference is also part of an ongoing effort by InWEnt, Capacity Building International, Germany, and the International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal, and of EU-China Panam Integrated Rural Development Project, TAR, P. R.

China, to raise awareness about poverty issues in mountain areas of Asia in collaboration with national agencies. For this conference, the Tibetan Academy of Agricultural and Animal Husbandry Sciences (TAAAS) played the lead role in organising the conference on behalf of the Government of the TAR. The EU-assisted EU-China Panam Integrated Rural Development Project was a key strategic partner whose contributions included building the framework for the contents of the conference, contributing the diverse results and experience gained through their multifocal project, and providing substantial financial support.

It is hoped that the conference has contributed significantly to the understanding of Tibet's uniqueness and, along with it, the development needs and aspirations of rural Tibetans. The experiences drawn from both within and outside the TAR from a wide range of participants with varied professional and academic backgrounds will no doubt be an important source of inspiration for the people and Government of the TAR in their efforts to achieve balanced development in rural mountain areas. We are confident that, with the immense goodwill available at home and abroad, the TAR will rapidly achieve its aspirations for a peaceful and prosperous region.

We wish the Government and people of the TAR all success!

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Preface

The International Conference on 'Sustainable Rural Development in Mountainous Regions with a Focus on Agriculture in the Tibet Autonomous Region' was hosted by the Tibetan Academy of Agricultural and Animal Husbandry Sciences (TAAAS) and organised jointly by InWEnt Capacity Building International, Germany; the European Union supported Panam Integrated Rural Development Project (PIRDP) and the International Centre for Integrated Mountain Development (ICIMOD). It was held from 26 to 30 July, 2004, at the Himalaya Hotel, Lhasa, in the Tibet Autonomous Region of China (TAR). The Conference was attended by delegates from the counties and prefectures of TAR, representatives from the various agencies of the TAR government, invitees from other regions of China and neighbouring countries, and experts and representatives from international and national development agencies as well as non-government organisations.

The overall objective of the conference was to contribute to a process of agriculturally related, sustainable rural development in mountainous regions of the Tibet Autonomous Region (TAR). Specifically it aimed to share key experiences of integrated rural development in mountainous regions with a focus on the TAR; to identify key challenges and opportunities for the development of and poverty reduction in rural areas; and to provide recommendations for market-oriented and sustainable agricultural and rural development strategies.

This conference emerged as a logical progression from previous ones sponsored by InWEnt and ICIMOD, and on each occasion with other local and international sponsors such as the International Fund for Agricultural Development (IFAD) and the Institute for Mountain Hazards and Environment (Chengdu, 2002). The first critical examination of poverty alleviation in mountain areas undertaken was in 1992 when experts came together to discuss 'Anti-poverty Experiences in China's Himalayan Region'. A similar grouping met in Kathmandu in 2000 (January 31st-February 4th) to discuss 'Growth, Poverty Alleviation and Sustainable Resource Management in the Mountain Areas of South Asia.' Hence the Lhasa conference has a history, a history of examining poverty in mountain areas in a critical manner and, more important, measures to overcome it. It was, however, the Chengdu conference in 2002 that recognised the Tibet Autonomous Region as the mountain area of China that should draw most concern, and hence the ground was prepared for the 2004 conference in Lhasa.

The papers bring out many pertinent points. The TAR is known for its unique environment characterised by harsh climatic conditions, fragile

landscape, clean water, and fresh air. It is also recognised for its unique culture and traditions. Yet, it is weaker socioeconomically than other provinces of China and, while much progress has been made through the support of the central and provincial governments as well as donor agencies and NGOs, there is still much that needs to be done to alleviate poverty and improve the general living standards of TAR's farmers and herders.

The challenges are many, but so are the opportunities. Coping strategies leading to sustainable development entail a balanced and integrated approach to address the challenges and realise the niche opportunities, not currently being exploited – as income-earning opportunities appear to be poor and nutrition was a concern of many of the participants at the conference. Many authors focused on safe drinking water and a constant supply of energy and improvements in education and health and called for a renewed impetus in providing social and economic support services and infrastructure.

Although the conference identified a number of desirable improvements, it is clear from the papers in this book that substantial investments have been made in infrastructural development by the central and provincial governments and that the living conditions are generally much better than 20 years ago. What the paper writers call for is better targeting of investments to have a more concerted impact on the quality of life in rural areas.

The papers are interesting in that they cover a wide range of topics. They do not approach the topic from a single entry point of doom and gloom, but examine specific issues such as significant disparities between counties and prefectures in living standards, income levels, and access to goods and services, and examine what might be the reasons for them. This approach is very valid when examining the economic, social, and cultural gaps between urban and rural areas. Other weaknesses in poverty alleviation measures according to the participants were coordination and cooperation among and between various government agencies, donors, INGOs, NGOs, and local institutions. Forward-looking measures such as Village Level Development Plans, adopted under the County Poverty Alleviation Planning Methodology using participatory approaches, introduced by the government would obviously go a long way to solving problems of poverty with all-round coordination and cooperation.

Some participants discussed their concerns about globalisation and the free market; although these had opened up new income-generating opportunities, the challenges were a very real concern. It was proposed that a mix of comparative advantages offered by the pristine environment

and unique culture and traditions of the people of the TAR could be exploited to capture niche markets for products and services such as organic food*products and eco-tourism. The new railway was seen as a possible gateway to the rest of China and beyond. The main constraints to taking advantage of the market economy were not ignored; and these were seen to be the lack of economy of scale, poor quality of goods, inaccessibility to markets and market information, lack of enabling environment, inadequate investment in processing facilities, and weaknesses in marketing skills and entrepreneurial spirit.

Many ideas came out of this conference: from the suggestion that a systematic poverty assessment exercise be carried out based on existing data to improve delivery of services to poor and marginalised households, through suggestions that the TAR government should strengthen and accelerate the adoption of participatory planning and implementation of rural development programmes by improving the capacity of government officials in participatory planning and management approaches through a focused training programme, to ideas about integration of organic food production into the pastoral and farming production system.

The results of the conference discussions were put into immediate and direct use. The national participants took part in a three-day, focused study tour to the EU-China Panam Project in TAR and discussed improvements that could be considered based on the results of the conference. A presentation was also made to the TAR Government so that it could immediately benefit from the knowledge generated.

We, the editors, hope that this document will give you a broad insight into the problems of poverty amongst farmers and herders in the Tibet Autonomous Region. It does not claim to have all the answers, or indeed to have an in-depth analysis of all the problems facing the rural poor on the roof of the world. Time and again, however, authors referred to the strong support given by the central and provincial governments to poverty alleviating initiatives; and this is heartening to hear.

We realise that there are gaps in our knowledge and understanding and that there is a long way to go before we can see an end to poverty not only in the TAR but elsewhere in Asia's mountain regions. Nevertheless, we sincerely believe that this conference and its proceedings have given us a tremendous start and provided us with a significant stepping stone into a better future for the rural poor of the TAR.

Pema Gyamtsho
Nyima Tashi
Karl Kaiser
Jürgen Richter

Acronyms and Abbreviations

ABC	Agricultural Bank of China
ACAP	Annapurna Conservation Area Project
ACIAR	Australian Council for Agricultural Research
AEZ	agro-ecological zone
AHF	American Heritage Foundation
AHT	Agrar and Hydrotechnik (German consulting company)
AI	artificial insemination
AKDN	Aga Khan Development Network
AKF	Aga Khan Foundation
AKRSP	Aga Khan Rural Support Programme
ASIA	Association for International Solidarity in Asia
BAEES	Baxue Agricultural Experiment and Extension Station
CAMCs	Conservation Area Management Committees
CAMR	Conservation Area Management Regulation
CAS	Chinese Academy of Sciences
CBO	community-based organisation
CBS	Central Bureau of Statistics
CCPC	Central Committee of the Communist Party of China
CEU	Commission of the European Union
CIAD	Centre for Integrated Agricultural Development
CIS	Commonwealth of Independent States
CPC	Communist Party of China
CRAC	Community Resource Action Committee
CRAJSC	Community Resource Action Joint Sub Committee
CTF	Community Trust Fund
DDC	District Development Committee
DNPWC	Department of National Parks and Wildlife Conservation
DOFCOM	Department of Commerce
DSE	Deutsche Stiftung für Internationale Entwicklung (German Foundation for International Development)
EC	European Commission
ERR	economic rate of return
EU	European Union
FA	financing agreement
FAO	Food and Agriculture Organization of the United Nations

FTIG	Farmer Technical Interest Group
GATS	General Agreement on Trade and Services
GATT	General Agreement on Trade and Tariffs
GDP	gross domestic product
GEF	Global Environment Facility
GIS	geographical information system
GMP	good manufacturing practice
GPL	gravity-fed pipeline water supply system
GTZ	German Agency for Technical Cooperation
ha	hectare
HACC	hazard analysis central control point
HDPE	high density polyethylene pipes
HKH	Hindu Kush-Himalayas
HMGN	His Majesty's Government of Nepal
HP	hand pump
HSPC	Hygiene and Sanitation Promotion Campaign
ICIMOD	International Centre for Integrated Mountain Development
ICLFM	integrated crop-livestock-forestry model
ICLP	integrated crop and livestock production
IMF	International Monetary Fund
InWEnt gGmbH	Internationale Weiterbildung und Entwicklung gGmbH (Capacity Building International, Germany)
IPR	intellectual property rights
IPS	integrated primary school (grades 1-6)
IUCN	The World Conservation Union (International Union for Conservation of Nature)
KMTNC	King Mahendra Trust for Nature Conservation
LDC	least developed countries
LFA	logical framework analysis
Log Frame	logical framework
masl	metres above sea level
MFA	Ministry of Food and Agriculture
MFN	Mongol farmer newspaper
MOAC	Ministry of Agriculture and Cooperatives
MOFCOM	Ministry of Commerce
NGO	non-government organisation
NRM	natural resource management
NSOM	National Statistics' Office of Mongolia
NTFP	non-timber forest products

OECD	Organisation for Economic Cooperation and Development
OVI	objectively verifiable indicator
PRC	People's Republic of China
PC	Panam County
PCBAL	Panam County Bureau of Agriculture and Livestock
PCEB	Panam County Education Bureau
PCHB	Panam County Health Bureau
PCMS	Panam County Middle School
PCWRB	Panam County Water Resources' Bureau
PEPC	Prefecture Epidemic Prevention Centre
PIRDP	EU-China Panam Integrated Rural Development Project
PMO	project management office
PRA	participatory rural appraisal
PRC	People's Republic of China
PRSP	Poverty Reduction Strategy Paper
R&D	research and development
RDI	regional development indicator
RMB	Ren Min Bi (Chinese currency)*
RSPN	Rural Support Programmes' Network
RSPs	rural support programmes
RWSS	rural water supply and sanitation
SARS	severe acute respiratory syndrome
SFL	sustainable livelihood framework
SU	sheep unit
TAAAS	Tibetan Academy of Agricultural and Animal Husbandry Sciences
TACIS	Technical Assistance for the Community of Independent States
TAR	Tibet Autonomous Region
TBA	traditional birth attendants
Tgs	Tugrugs
TRIPS	Trade Related Aspects of Intellectual Property Rights
TVO	traditional village organisation
UB	Ulaan Baatar city
UMBCP	Upper Mustang Biodiversity Conservation Project
UNDP	United Nations Development Programme
USA	United States of America
VAP	village action plan

VCMT	village coordination and monitoring team
VCT	village crop technician
VDP	village development plan
VCT	village crop technician
VDC	village development committee
VO	village organisation, Sindh Graduates' Association
VT	village veterinary technician
VWST	village water and sanitation committee
Watsan	water and sanitation
WUE	water use efficiency
WB	World Bank
WFP	World Food Programme of the United Nations
WO	women's organisation
WTO	World Trade Organisation

Glossary

1 ha = 15 mu
1 mu = 667m²

Tibetan

ani	nun
Changthang	northern land of Tibet
dri	female yak
gelong	monk
gompa	monastery
gang	glacier
gang ri	mountain
Kham	eastern province of TAR
la	pass
lam	path
lhakhang	chapel
momo	steamed dumpling
nay	barley
ne	place of pilgrimage
phu	the upper part of a valley (rangelands)
rongpa	farmer, valley dweller
drogpa	herder, pastoralist
shingba	farmer, cropping farmer
thang	plains
tsampa	roasted barley flour which is the staple for Tibetans
tshokchen	great assembly hall
tsho	lake
zo	male crossbreed of yak and cattle
zom	female crossbreed of yak and cattle

Chinese

can ting	big restaurant
chaoshi	supermarket
cun	village
Cun Zhang	village headman
fanguan	small restaurant
gaodu/changdu danwei	measurement of height/length (m or cm)
hu	household
huiyi	conference
jiachu	livestock
jiedao	street

* 1 US\$ = 8.28 Chinese Yuan (July, 2004)

jiuba
luyou
mu
pinkun
quan qiu hua
sheng
Sheng Zhang
shichang
shimao zuzhi
Shizang
tiji danwei
xian
Xianzhang
Xizan
Yuan
zhen
zhengce
zhongling danwei
zhou
zuowu
Zhouzhang

Mongolian

Aimag
Hot Ail

Bag
Soum

bar
tourism
measurement of area (15 Mu = 1 ha)
poverty
globalisation
province
provincial governor
market
WTO
mayor
measurement of volume (litre)
county; administrative centre
county governor
Tibet
Chinese currency
town
policy
measurement of weight (kg)
prefecture
crop
prefecture governor

region
informal group of herder households living
close together and sharing labour etc.
community
district

Fact File: Tibet Autonomous Region

Location

South-Western China between 26°50' to 36°53'N (2000 km) and 78°25' to 99°06'E (1000 km)

Altitude

Average of 4000 masl

Mean annual temperature

-4 to 12°C

Mean rainfall

100 mm in the driest to 2500 mm in the wettest zones

Capital

Lhasa

Prefectures

Shigatse, Shannan, Naqu, Chamdo, Ali, and Linzhi

Counties

71

Townships

534

Towns

140

Villages

5956

Population (2002)

Total: 2.66 million, rural population: 2.14 million, male population: 1.35 million, female population: 1.31 million

GDP

Total: 16100 million yuan (2002) From agriculture: 5585 million yuan

Total area

1.2 million sq.km., arable land area:0.49 million ha, rangeland:
61.6 million ha, forest land: 13.9 million ha, barren land: 44.3
million ha

Annual crop production

barley (129,600 ha); wheat (44,770 ha), areas (2002) rape seed
(20,390 ha), vegetables (9,740 ha), peas (11,080 ha)

Livestock population (2002)

24 million head yak and cattle - 58 million; horses - 0.4 million;
donkeys - 0.13 million, sheep and goats -178.2 million

Livestock production (2002)

meat: 172,000 MT, milk: 243,000 MT, wool: 9,400 MT,
cashmere: 640 MT

Tourists

total: 206,600 in 1995 and 867,300 in 2002
domestic: 138,780 in 1995 and 725,040 in 2002
overseas: 67,800 in 1995 and 142,300 in 2002

Source: Statistical Yearbook of the Tibet Autonomous Region 2003

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Note: The papers in this volume have been edited into the current form, in some cases without further review by the authors. Some were translated from papers presented in Chinese.

Chapter 1

Sustainable Rural Development in Mountainous Regions with a Focus on Agriculture in the Tibet Autonomous Region - An Overview of the Conference's Objectives and Outcomes

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INTRODUCTION

This chapter describes the background and objectives of the conference, its structure, and major outcomes and recommendations. It is not intended to be a conventional report of the proceedings of the conference by providing a session-wise record of discussions but rather reflects the spirit of the conference and a summary account of how it went and what it achieved.

BACKGROUND AND OBJECTIVES

The Tibet Autonomous Region

The Tibet Autonomous Region of China (TAR) covers 1.2 million square kilometres and is located in the south-western part of China between 26°50'N and 36°53'N latitude and 78°25' E to 99°06'E longitude. It borders the other Chinese provinces of Qinghai and Xinjiang to the north, Sichuan and Yunnan to the southeast, and the South Asian countries of India, Nepal, and Bhutan to the southwest and south. With an average altitude of more than 4,000 masl and characterised by harsh climatic