1 Introduction: West China Development — Issues and Challenges

Ding Lu and William Neilson

China has been the world’s fastest growing economy in the last two decades, in which its total GDP sextupled. This remarkable economic growth has been, however, mainly a coastal phenomenon. The country’s western inland region, with a total area of 6.85 million km (71.4% of the whole nation), was largely left out of the boom. While its population (367 million by 2002) accounts for 28.8% of China’s total, its share of the national GDP is under 17%. The per capita income of the western region is less than 40% of the level in the eastern region.

At the turn of the century, the Chinese government launched the West China Development Program, aiming to reorient the growth vigour towards the western region. A series of fiscal initiatives and institutional innovations have been proposed and implemented to boost the region’s development prospects and close the income gaps between the western inland provinces and the rest of China. In the first three years of this program, 36 mega infrastructure projects with investment over 600 billion yuan (equivalent to US$ 72 billion) have taken off. China’s banking sector has increased another 600 billion yuan of loans to the provinces in the western region. To Chinese policy makers, the development of the west region is meant to reduce interregional disparities and to meet both environmental protection and national security goals. Outside of China’s borders, the effects of this development will be far-reaching, both regionally and globally, with repercussions in several areas including the environment, regional governance and human security, poverty reduction, and trade and investment.
To study the major domestic issues and global implications of this development program, the University of Victoria’s Centre for Asia Pacific Initiatives organized and hosted an international conference on March 6-8, 2003. About 65 scholars, policy-makers and development practitioners from Canada, China, U.S., and other countries attended the event, the first multi-disciplinary international symposium of this scale on the theme. All the papers were written and presented by specialists/professionals who have done significant research regarding China’s regional development. Their areas of specialty include economics, political science, sociology, geography, history, environment, and regional planning. Several of the Chinese writers have been personally involved in regional policy making at central or local governmental levels. A number of non-Chinese authors have experience working on China-related projects or providing consulting and fieldwork services to the Chinese government and institutions.

This volume collects 24 of the papers presented at the conference. We group these papers around five major issues of the West China Development Program: (1) the goals and objectives; (2) the coordinating institutions and mechanism; (3) the effectiveness and efficiency of development strategies and policies; (4) the distribution of benefits and costs; and (5) sources of interregional disparity.

Part I, “Goals and Objectives”, has four papers. They carry in-depth discussions on complements, tradeoffs and possible conflicts of priorities among the goals of the West China Development Program. These goals include achieving economic growth, improving inter-regional income equality, enhancing environmental protection, and consolidating national security and unity.

In Chapter 2, “Designing a Regional Development Strategy for China”, Dwight Perkins (Harvard University, USA) leads the discussion by examining several goals of China’s regional development strategy, i.e. the goal of binding the different parts of China to the homeland, the goal of extracting natural resources of mineral and energy industries for the interior region, and the goal of reducing inequality between the people of the coast and the people of the interior. After highlighting the differences in these goals, he recommends “a policy of allowing unfettered migration to the cities with families” from the interior to the coast and discusses its feasibility
and benefits. In his opinion, “a true regional development strategy in a market economy focuses mainly on getting the market to work properly”.

In Chapter 3 “Eco-Environmental Protection and Poverty-Alleviation in West China Development”, Zheng Yuxin and Qian Yihong (Centre for Environment and Development, China Academy of Social Sciences) point out that most areas of Western China are ecologically vulnerable with adverse geographic conditions. The problem of excessive exploitation of the environment is always precipitated by people’s efforts to lift themselves out of poverty. Addressing the vicious cycle of “poverty – environment deterioration” should be a major goal of West China Development Program. To achieve this objective, public policy initiatives are necessary to internalize the external socio-economic impact of poverty alleviation and environmental protection. In contrast to Perkins’ confidence on market, the duo argue that market mechanism is not sufficient to provide appropriate incentives for environmental protection. “The establishment of an ecological compensation mechanism must depend on non-market measures, particularly government interference at various levels”, concluded Zheng and Qian.

Robert Bedeski (University of Victoria, Canada) places the contemporary West China development in a geopolitical perspective in Chapter 4, “Western China: Human Security and National Security”. He reviews the western region of China as a frontier of national security concerns for the central governments of various eras. In particular, he discusses the changes in the geopolitical situation of this frontier since the incident of September-11 and signifies national security as a strategic goal of the West China Development Program. However, the author expresses concerns over the program’s possible negative impact on human security in the western provinces and autonomous regions as it may transform them “into areas that more closely resemble the societies and economies of the eastern provinces”.

Zhao Xiusheng, Dai Jian, and Shen Hon (Tsinghua University, China) discuss the goals of development at a micro level in Chapter 5, “Reconciliation between Ecosystem Preservation and Economic Development Initiative”. The discussion is based on a project, Tarim Basin Water Management and Desertification, which is one of the many
cooperative initiatives between Canada and China in regional development. Funded by Canada’s International Development Research Centre (IDRC), Tsinghua University and Xinjiang Academy of Agricultural Sciences jointly undertook the project to address the chronic water stress and local development issues in Tarim Basin of Xinjiang Uighur Autonomous Region. In the paper the authors advocate a community-based water resource management approach to address the dual objectives of ecosystem preservation and economic development with local initiatives and participation.

Part II of this volume is about the “Coordinating Institutions and Mechanism” in the endeavour to develop West China. The five papers in this volume highlight the need for institutional reforms to coordinate interests and initiatives between the central and local governments, among different governmental branches and local authorities.

Chapter 6, “A New Pattern of Regional Cooperation in China”, is the work of three researchers, Li Shantong, Hou Yongzhi and Feng Jie (Development and Research Centre of China’s State Council). The authors propose to establish four supra-provincial “economic belts” that horizontally link provinces and regions across eastern and western parts of China. They believe that the launch of these “economic belts” will enhance inter-regional and inter-province coordination of local development plans, reduce inter-regional income disparity, help the nation to achieve sustainable growth, optimize industrial structure based on regional comparative advantages, and facilitate China’s participation in international economic cooperation. They advise the Chinese government to guide and encourage regional specialization, industrial relocation and industrial restructuring within these “economic belts” and, through overall planning of the economic belts in industrial development, infrastructure building and environmental protection, to eliminate inter-region blockade and trade barriers. With a supra-provincial administrative structure overlooking these “economic belts”, it is possible to develop a welfare compensation mechanism for ecological projects between the upper reaches and the lower reaches within each belt.

In Chapter 7 “The Political Logic of Fiscal Transfers in China”, Wang Shaoguang (Chinese University of Hong Kong) empirically examines the
central government's allocation of net fiscal transfers across provinces. He found that the patterns of transfers exhibit a discernible political logic. While equity considerations appear to play some role in central policies of regional redistribution, the concern of central policy makers about national unity is the most important determinant in the fiscal transfer system. On top of that, there exists an unequal per capita representation in the Central Committee of the Chinese Communist Party and this distribution of representation appears to have a positive and statistically significant effect on fiscal transfers. These findings support the hypothesis that “the distribution of fiscal transfers is largely determined by the interactions between central and regional politicians, both of whom are motivated to maximize their chances of staying in power within given institutional constraints”. This political logic casts light on the coordination mechanism in China's regional development.

Policy coordination must work through the political structure, which is discussed in Chapter 8 “The Politics of China's Western Development Strategy” by Gregory T. Chin (Canadian International Development Agency). He first outlines the “core structure” of decision-making and administration for the Western Development Initiatives inside the central government. He then discusses intra-bureaucratic tensions inside this structure and the central-local tensions in the implementation of central policies. He observes that in contrast to earlier regional development programs in earlier history of the People's Republic, the current Western Development Strategy has been introduced through a more institutionalized and consensual process of decision-making. Several recommendations are offered to the Chinese policy makers for strengthening the effectiveness and positive politico-developmental impact of the Western Development Initiatives.

Chapter 9 “An Introductory Environmental Macroeconomic Framework for China” illustrates the need for cognisance of the role of environmental capital in the formulation of plans for the development of West China. The three economists, Dodo Thampapillai, Euston Quah, and Shandre M. Thangavelu (National University of Singapore), internalize the environmental capital into a standard macroeconomic framework in the context of the Chinese economy. Although in this paper the authors
confine China’s environmental capital to its air shed and its stock of forest cover, their model can be extended to internalize more broadly defined environmental capital stock and also other external effects such as income distributional impact. This exercise is useful for coordinating regional development and answers directly to the call by the authors of Chapter 3 for “establishing the measuring criteria for ‘environment value’” in economic growth.

Glen Filson, Neal C. Stoskopt, J. Simpson and L. Kannenber (University of Guelph, Canada) describe another Canada-China joint project in West China in **Chapter 10** “The Western China Development Strategy: an Agroforestry Approach”. This project involves a broad spectrum of people including administrators and scientists from China, and research personnel from the University of Guelph and a non-governmental organization, Resource Efficient Agricultural Production (REAP). The aim of the project is to reduce environmental degradation along the Yellow and Yangtze Rivers and alleviate poverty for local communities. Eleven sub-watershed areas along these rivers were chosen by China’s Ministry of Water Resources as demonstration sites for a holistic approach consisting of biological, physical and social aspects to make major environmental, economic and social changes. The chapter provides a detailed account of involvement the two Canadian institutions in the project as well as their agroforestry approach for local development.

**Part III** concerns the questions of “Effectiveness and Efficiency”. Several components of the West China Development Program, such as the projects of transportation, reforestation, and natural resource extraction have come under scrutiny.

**Chapter 11** “On the Urban-Rural Relationship in the Process of Western Region Development” is contributed by Shi Yulong and Du Ping, two leading experts at the Institute of Spatial Planning & Regional Economy under China’s State Development and Reform Commission. With their experience of direct involvement in the government’s regional policy making, the authors first review in this chapter the main consensuses and diversified views regarding the goals and policies of the western region development among Chinese policy makers and academia. They then give a brief account of the activities and achievements of the West China
Development Program in its first three years (2000-02) of practice and critically comment on the aspects that need to be improved. Based on these observations, the authors point out that the program should firstly be a development aid program to contain the growing regional disparity. They recommend that promotion of human development should be a major goal for this program and the small and medium-sized projects that can directly improve the life of local people should be given the top priority in the government's development plan. As for urbanization in the western region, the focus should shift from construction of hardware infrastructure to building up the rural people's capability of living and working in urban areas through improving their health and skills.

In Chapter 12 "The Western Regions' Growth Potential", Ding Lu and Elspeth Thomson (National University of Singapore) examine the market access conditions across regions to estimate the extent to which China's ambitious plans for transport infrastructure development in the western region will increase its growth potential. They find that differences in the transportation-cost denominated market- and supply-access conditions are a major cause of inter-regional income disparity. Meanwhile, the extent of institutional reforms matters a great deal in growth-performance differences across provincial economies. The authors caution that, if overall market accessibility is not sufficiently improved, lower transportation costs could accelerate the decline of periphery centres and industries.

In Chapter 13 "Measuring the Impact of the 'Five Mega Projects'", Lin Ling and Liu Shiqing (Academy of Social Sciences of Sichuan Province, China) critically examine the effects of five mega projects of West China Development, namely, the ecological environment construction project, the West-to-East natural gas transportation project, the West-to-East electricity transmission project, the Qinghai-Tibet railway project, and the South-to-North water diversion project. They observe that the West China Development Program benefits the whole country but continues to widen the East-West gap as the division of labour between the eastern and western regions remains the same. They also criticize that the environmental construction in the western areas lacks a powerful and sustainable development strategy and the prospect of investment returns and debt
redemption for West China development is still gloomy. The authors thus call for a policy adjustment for western region industrial development.

The Grain-for-Green Policy is a major part of West China Development Program to restore ecological balance in the western region by turning low-yielding farmland back into forest and pasture. In Chapter 14 “Grain-for-Green Policy and Its Impacts on Grain Supply in West China”, Yaqi Zhang (University of Alberta) and Zhimin Feng (China Academy of Sciences) assess the impact of this policy in the Upper Reaches of the Yangtze River and the Upper and Middle Reaches of the Yellow River. They show that the impact on grain supply at the country level is only about 2-3% so it should not be a threat to China future grain supply (2-3%) and the world market. They nevertheless caution that the impact on the local level can be significant and the associated socio-economic issues should be addressed properly. They also express concerns over the sustainability of the policy when state compensation for farmers expires in a few years. Therefore, the authors suggest that the Grain-for-Green policy should be gradually implemented, first target on those most ecologically sensitive farmlands. They also propose that Grain-for-Green policy be integrated with other socio-economic reforms and the best long-term strategy is to encourage emigration from environmentally vulnerable areas.

Education and human capital development are high on the agenda of West China development. Yu Li (University of British Columbia, Canada) addresses this issue in Chapter 15 by reviewing the historical experience of Sichuan in the first two decades of the 20th century. Despite the fact that education reform in Sichuan achieved greater quantitative success than all of the coastal provinces in the early 20th century, it failed to result in social and economic development in the later years. The gap between the province and coastal China continued to enlarge through the decades. Yu observes that education is certainly a necessary, but not sufficient, requirement of economic growth. In China’s western landlocked areas, “there might be some more important and urgent works than the expansion of education”. The mismatch between what is taught in schools and what is needed in local development may cause failure of human capital accumulation and brain drains.
The issue of Part IV, “Distribution of Benefits and Costs”, drew serious attention from the audience at the conference. Multiple, reasoned criticisms were voiced over distributional implications for women, indigenous peoples, local communities and other social groups who will likely not share the economic advances predicted by the West China Development Strategy planners.

**Chapter 16** “The New Challenges Facing the Development of West China” by Liu Shiqing and Lin Ling (Sichuan Academy of Social Sciences) scrutinizes the West China Development Program from the perspectives of local people. According to the authors, the first challenge is how to integrate the environmental protection with creating avenues for local peasants to better their economic prospects. The second issue is coordinating infrastructure construction with the technological transformation and development of manufacturing industry in the western provinces. They also argue that the exploitation of natural resources should be integrated with the development of processing industries in the region. Therefore they call for more state support in terms of preferential policies.

Since the 1980s, inter-regional income and opportunity disparity has led to increasing volume of voluntary inter-regional migration, a phenomenon in China’s regional economic development. Shuming Bao (University of Michigan) and Wing Thye Woo (University of California at Davis) look into this issue in **Chapter 17** “Migration Scenarios and Western China Development”. They first give an overview of historical distribution of population over last 50 years, especially after 1978. Then they describe the migration flows between urban cities, towns and rural areas, and between different regions in the past decade. In particular, they identify the net “gainers” and “losers” of migrants by region and analyze the types of migration by motivation, gender and employment sector. Applying Roberto Bachi’s Migration Preference Index, the authors also identify the national “centres of attraction” to migration in recent years.

A major socio-economic impact of regional economic development falls on distribution of costs and benefits between men and women. Govind Kelkar, Editor of India’s **Gender Technology and Development Journal**, provides her observation of changes in gender relations and ecological consequences of tourism development in Lijiang of Southwest China in **Chapter 18**. The
case is of particular interest since the village under her study has both matrilineal systems and patrilineal systems being practised by different ethnic groups. Based on information collected from interviews with local residents, the author discusses ethnic, class and gender factors in determining who are able to take advantage of globalization in the context of the growth of tourist trade.

The Tibet Autonomous Region is of strategic importance to West China Development Program. In Chapter 19, Namgyal (Department of Information and International Relations, Central Tibetan Administration, India) raises doubts about the benefits of the program to the indigenous Tibetans. After lamenting some negative impacts of the development in the past decades on the environment and local communities, the author points out that a fundamental question for policy making is “how best to spread the benefits of rapid growth and modernization to the relatively poor Tibetan populations depending on subsistence agriculture and nomadic livestock production”. He thus proposes that the rural population—herdsmen and farmers of the Tibetan plateau—should be made the centre of economic planning.

Developing West China has significant economic and geopolitical implications on China’s neighbouring countries. Chen Zhilong (Fudan University, China) deals with this issue in Chapter 20 “The Significance of West China Development to Asian Economic Integration”. Citing trends of trade and investment in Asia, Chen predicts that West China development will facilitate economy integration from East Asia to Middle Asia and create many opportunities for businesses in these regions. He also observes that the central and regional governments in China have already taken initiatives in promoting economic co-operation at national, sub-national and enterprise levels across country borders.

There are four papers in Part V “Sources of Interregional Disparity”. The authors of these papers explore the causes and sources of interregional disparity. Their findings raise significant policy implications for the direction, pace and impact of the West China Development Strategy.

Chapter 21 “The Relative Contributions of Location and Preferential Policies in China’s Regional Development” is the work of a team of economists: Sylvie Déúmero (Centre National de la Recherche Scientifique, France),
Jeffrey D. Sachs (Columbia University), Wing Thye Woo (University of California at Davis), Shuming Bao (University of Michigan), and Gene Chang (University of Toledo). With a measure of the ability to participate in international trade (Geography), and a preferential policy index (Policy), the authors empirically investigate various factors that might have contributed to disparity of growth performance across provinces. The results suggest a failure of economic growth in the past two decades to cause convergence of per capita income across regions. The authors interpreted this failure by pointing out several Chinese institutions that have inhibited the income convergence process generated by factor movement and trade-induced factor price changes. They therefore propose reforms of these institutions, including the household registration system, the monopoly state bank system, and the decentralization-unleashed local protectionism.

In Chapter 22, Ding Lu (National University of Singapore) and Wing Thye Woo (University of California at Davis) examine the role of urbanization in regional growth disparity. They first review China's urbanization and regional development strategy before economic reform and show that the patterns of urbanization in the early 1980s did not reflect the location and size distribution pattern of a market economy. They then use econometric approach to gauge the impact of urban size distribution on economic growth. Based on their findings, they observe that under-urbanization and inefficient city-size distribution are partially responsible for China's growing interregional development disparity in recent years. They therefore recommend policies to remove institutional barriers to urbanization and factor mobility in regional economic development.

In Chapter 23 "China's Regional Disparities in 1978-2000", Zhigang Lu (China's Tianjin University) and Shunfeng Song (University of Nevada at Reno) review China's regional development policies and strategies before and after China's opening-up. Applying a net-effect growth model to provincial data for the period of 1978-2000, the authors find that China's net growth in GDP is significantly affected by the increases in labour, fixed assets, human capital, domestic retail sales, exports and foreign direct investment. They also observe three main sources of uneven regional development in China: technology catch-up advantage, policy advantage,
and the functioning of market mechanisms. They advise Chinese leaders to develop policies to strengthen development in cooperation among regions and provinces.

Chapter 24 “Development of West China: Marketization vs. FDI” is authored by Wen Mei (Australian National University). She does an econometric exercise to support her observation that various degrees of marketization and foreign direct investment flows are crucial factors associating with inter-regional growth disparity. This leads to the argument that the key to developing China’s inland regions and to reducing inter-regional income disparity is to “accelerate development of a market mechanism” there.

From above preview of the chapters in this volume, one can identify many controversial viewpoints as well as consensuses. Some of the views are sharp and critical. For instance, the top-down and mega-project approach taken by China’s central government in developing the west regions was questioned and challenged by several authors. Some papers have inquired into the sensitive issues of local ownership and participation by indigenous communities. On top of these, many policy proposals have been made to tackle these issues.

As this volume goes to print, it is worthwhile to update our readers with some recent adjustments in the Chinese government’s regional policy since our conference was held in Spring 2003. These developments have taken place against the backdrop of the leadership succession in Beijing as a new generation of leaders, headed by Hu Jintao (Party General Secretary and State President), and Wen Jiabao (Premier) took the helm. One is that the new leadership has vowed to rejuvenate the “rustbelt” of heavy industrial base in provinces of Northeast China. This region used to be a stronghold of the centrally planned state-owned industrial base but has suffered from stagnation since the 1980s due to its tardiness in market-oriented reforms. Its superior geographic location, well-built infrastructure, and rich human capital, however, bode well for a market-driven resurrection once the institutional barriers are overcome. It seems that the new leadership has started a subtle shift of regional development focus to regions with better economic potentials and promise.
A second policy change with important implications for regional development is the decision taken at the Third Plenum of the 16th Central Committee of the ruling Communist Party in October 2003 to provide better protection for private property rights and to allow farmers to transfer their rights to land, thus letting some amass large holdings. This policy change matches well the suggestion for using private property rights as leverage to sustain environment-friendly development put forward by some experts, including several authors of this volume.

The most recent sign for perhaps the most far-reaching policy adjustment is the announcement by Zhou Ganzhi, a leading adviser with China’s Construction Ministry, that the government is mulling over a massive “West-to-East” campaign to migrate 100 million farmers in the undeveloped western region to the booming eastern coast – the Pearl River Delta, the Yangtze River Delta and the Beijing-Tianjin region. Earlier, Wang Mengqui, Director of Economic Development Centre under the State Council, also revealed that the government has a plan to encourage 300-500 million farmers to migrate into urban areas before 2020. This plan matches the trends of voluntary migration described in Chapter 17 and reflects a market-oriented emigration-urbanization approach recommended by several authors of this volume for West China development.

These adjustments are indications of growing “rethinking” among China’s policy makers about the merits of a top-down and mega-project based approach of the West China Development Program in the past few years. Here again, we are glad to appreciate the fact that many critical views towards this program did not fall on deaf ears. That is the greatest reward to the authors as well as the editors of this volume.

Notes

Introduction
