

CHINA

GUANGXI POVERTY REDUCTION PROGRAM FOR RESULTS
(P163138)

TECHNICAL ASSESSMENT

May 17, 2018

World Bank

Acronyms

AFUP	Annual Fund Use Plan
5YP	Five-Year Plan
CPRF	Consolidated Poverty Reduction Funds
CPRP	Consolidated Poverty Reduction Program
DLI	Disbursement Linked Indicators
GoC	Government of China
GRPRP	Guangxi Rural Poverty Reduction Program
IBRD	International Bank for Reconstruction and Development
RDOA	Regional Department of Agriculture (Guangxi)
RDOF	Regional Department of Finance (Guangxi)
PAP	Program Action Plan
PCO	Program Cooperation Office
PDHEs	Poverty Reduction Dragonhead Enterprises
PforR	Program-for-Results
PRO	Poverty Reduction Office
PROSC	Poverty Reduction Office of the State Council
MOF	Ministry of Finance
NDRC	National Development and Reform Commission
NPRS	National Poverty Registration System
RA	Results Areas
RDRC	Regional Development and Reform Commission (Guangxi)
RCDC	Regional Center for Disease Control
WB	World Bank

Contents

I. PROGRAM DESCRIPTION	1
A. National Rural Poverty Reduction Program	1
B. Guangxi Rural Poverty Reduction Program (GRPRP).....	3
C. Guangxi Consolidated Poverty Reduction Program and the “PforR”.....	4
II. DESCRIPTION AND ASSESSMENT OF PROGRAM STRATEGIC RELEVANCE AND SOUNDNESS	10
A. Strategic Relevance	10
B. Technical Soundness	19
C. Institutional Arrangements for the PforR.....	39
D. Disbursement Arrangements.....	42
III. DESCRIPTION AND ASSESSMENT OF PROGRAM EXPENDITURE FRAMEWORK	42
A. Expenditure Scope.....	43
B. Program Financing.....	45
C. Expenditure Performance.....	47
D. Recommendations	50
IV. DESCRIPTION AND ASSESSMENT OF PROGRAM RESULTS FRAMEWORK AND M&E	50
Results Area 1 Improved Income Generation of the Poor	51
Results Area 2 Improved Infrastructure for Rural Poor	58
Results Area 3 Cross-cutting Issues for Enhanced Program Implementation.....	61
V. PROGRAM ECONOMIC EVALUATION	81
VI. IMPLEMENTATION SUPPORT PLAN	85
VII. PROGRAM ACTIONAL PLAN	87

Index of Tables

Table 1: Program Financing, 2018-2021	5
Table 2: 28 selected poverty-stricken counties, Guangxi 2016	6
Table 3: Official estimates of Poverty in China, 1980-2017	11
Table 4: Top five provinces by number of poor in 2016	11
Table 5: Multiple regression of policy variables upon changes in poverty, selected counties, Guangxi 2013-2016	17
Table 6: Profile of Regional and National Level Poverty Reduction Leading Enterprises: 2010	23
Table 7: Selected Indicators of Agricultural Leading Enterprises in Targeted Poverty Counties and at the Regional Level: 2016	24
Table 8: The Program Expenditure Framework by Results Areas, 2018-2020 (US\$ million)	43
Table 9: Outlay of the Program Expenditure Framework, by programs	44
Table 10: Funding Sources of Consolidated Poverty Reduction Program in 2017	45
Table 11: Budget Execution Rate of 28 Targeted Counties by Major Sub-Programs in 2017	49
Table 12: Results Framework Matrix	66
Table 13: Indicator Description	68
Table 14: Disbursement Linked Indicators Matrix	74
Table 15: DLI Verification Protocol Table	77

Index of Figures

Figure 1: Government Program and PforR	5
Figure 2: Demographic characteristics of the poor in selected counties, Guangxi 2016	Error! Bookmark not defined.
Figure 3: Dynamics and drivers of poverty reduction in selected counties, Guangxi 2013-2016	15
Figure 4: Distribution of main cause of poverty, 54 poverty stricken counties, Guangxi 2016	18
Figure 5: Institutional Arrangement Framework, Guangxi	41
Figure 6: Budget Predictability versus Execution Rate of 28 Targeted Counties in 2017	47
Figure 7: Results Chain for improved income generation	52
Figure 8: Results Chain for improved infrastructure	58
Figure 9: Cross-cutting Issues for Enhanced Program Implementation	62

I. PROGRAM DESCRIPTION

A. National Rural Poverty Reduction Program

1. **Poverty Eradication Program under China's Thirteenth Five Year Plan (13th 5YP).** The 13th 5YP sets a national-level goal of eliminating extreme rural poverty by 2020. Among its major objectives - as delineated in Chapter 3 of the Plan- it includes "Improve standards of living and quality of life" and, in particular, it sets an explicit poverty eradication objective as follows: *"All rural residents falling below China's current poverty line will be able to lift themselves out of poverty, all poor counties will be able to rid themselves of poverty, and poverty alleviation will be achieved in all regions."* The plan allocates a full section to the directives on the "Fight Against Poverty", where it underlines the importance of focusing poverty efforts both on the poor and on poor areas: *"We will identify and register those living in poverty throughout the country ...(and) will strengthen dynamic statistical monitoring of these populations...."* The plan also includes a list of poverty alleviation programs in eight fields: locally viable industries, labor services, relocation from inhospitable areas, transportation, ecological conservation, education, health care and social security, and finance.

2. **The 13th 5YP Poverty Reduction Plan also introduces national and provincial assessment mechanism of the implementation progress of poverty reduction programs.** The focus of this new assessment mechanism includes: (i) number of poor, income growth rates, and other poverty reduction results; (ii) confirmation of households, villages, and counties' exit from poverty; (iii) poor's satisfaction rate with the work of village poverty reduction work teams and the poverty reduction assistance received from the responsible individuals listed in their NPRS records; and (iv) financial performance of the special poverty reduction funds. The 5YP also underlines the importance of responsibility and performance evaluation for poverty alleviation programs and staff: *"We will strengthen poverty-alleviation performance evaluation for officials, (...) We will establish a system for overseeing poverty reduction efforts, and strengthen corresponding accountability."* The Government has adopted independent third-party evaluations of the effectiveness of poverty reduction activities, in addition to its own internal evaluation teams, who are sent by the center down to the provinces and by the provinces and municipalities/prefectures down to the counties on both an announced and unannounced basis.¹

3. The ongoing ten-year poverty reduction program is summarized in the document: "Outline for Development-oriented Poverty Reduction for China's Rural Areas 2011-2020" (hereafter, "2011 Outline"). Maintaining the core approach of development-oriented poverty reduction, the 2011 Outline emphasizes the strengthening of several key measures to overcoming poverty including targets for: (i) completing and upgrading poor area rural infrastructure, such as access to safe drinking water, transport, power, farm land, irrigation, and housing; (ii) social protection programs, including further improvements in access to education, health care, and upgrading the rural welfare and pension systems; and (iii) environmental protection and green poverty reduction. For the core poverty reduction program, the 2011 Outline introduces or expands the following five LGOP "signature" activities:

- *National Poor Registration System*, central to the implementation of the 13th 5YP Poverty Eradication Plan is the establishment of the National Poverty Registration System (NPRS) in 2014, which contains the names and many characteristics of China's remaining poor. This data is available centrally and at all other administrative levels. There were around 70 million poor in the NPRS database in 2014. It is expected that about 40-50 million of those poor will be lifted out of poverty

¹ Citations from: The 13th Five-year Plan for Economic and Social Development of the People's Republic of China (2016-2020), Compilation and translation Bureau, Central Committee of the Communist Party of China, Beijing, China.

through various Chanye Fupin activities, another 10 million through voluntary resettlement programs, and the remaining 10 million through various social protection (doudi) programs, such as increased support for health care and educational expenses, and other measures;

- *Poverty Reduction through Agribusiness Enterprise Development (Chanye Fupin)*, which includes the production and processing of local leading agriculture products, either through farmer cooperatives or mutual fund organizations in combination with leading enterprises;
- *Voluntary Resettlement Program*, which provides assistance for poor households to voluntarily resettle from areas subject to life-threatening natural disasters, where the population density grossly exceeds the carrying capacity of the land, or where remoteness makes the provision of basic services prohibitively expensive, to newly developed areas;
- *Poverty Reduction through Employment*, which includes the improvement of various vocational training programs; and
- *Rural Financial Services*, which includes the strengthening of rural financial services and the encouragement of microcredit schemes.

4. The 2011 Outline maintains the poverty reduction program’s focus on fourteen contiguous poverty blocks (lagging poor regions). The fourteen contiguous poverty blocks include 505 nationally designated poor counties. Adding in some 175 nationally designated poor counties in Xizang, Sichuan and Xinjiang, and another 152 nationally designated poor counties, which are outside the fourteen poverty blocks, there are currently a total of 832 nationally designated poor counties².

5. The Chinese government has a well-funded and comprehensive poverty reduction strategy and program. Established in 1986, the State Council Leading Group Office of Poverty Alleviation and Development of China (LGOP) plays the lead role in orchestrating a wide range of rural poverty reduction programs, which seek to achieve China’s hallmark “development-oriented poverty reduction.” The poverty reduction system includes significant transfers from central government. These funds increased the total allocation to poverty reduction by more than ten billion yuan during 2001-10 decade, reaching RMB 22.3 billion yuan in 2010 (about USD 4.5 billion), and further jumped to about RMB 46.1 billion (about USD 7.5 billion) in 2015. These central government funds are regularly augmented by provincial and local funds, which on average represent up to 40 percent of total funds allocated to poverty reduction programs in each province.³ Since 2000, these poverty reduction funds have been supplemented by massive support for universal basic education, improved rural health programs, extensive rural welfare system, and dramatic improvements in transport, electrification, and other basic infrastructure in the countryside. Central and local government funding for expanding basic education, rural health, and rural welfare systems now exceed significantly the funding from the three core poverty reduction funds.⁴ Moreover, since 2016, and as part of poverty eradication focus of the 13th 5YP, a mechanism for consolidation of funds towards poverty reduction efforts enables regional and local authorities to re-allocate and increase funding to poverty programs.

² The designated poor counties receive most of the central and regional governments' poverty reduction funding and enjoy a number of preferential policies. With this strong fiscal support from the central and regional governments, the designated poor counties have expenditure levels which massively exceed their own self-sourced revenues. Preferential policies could include, for example, retaining a greater share of the revenues from oil and mineral extraction.

³ Data from State Council Leading Group Office of Poverty Alleviation and Development, *Yearbook of China’s Poverty Alleviation and Development*, 2016, 2015 and 2014.

⁴ The State Council White Paper “*New Progress in Development-Oriented Poverty Reduction for Rural China*” (Information Office of the State Council, 2011) reviews the progress of the totality of China’s poverty reduction work during 2001-10.

B. Guangxi Rural Poverty Reduction Program (GRPRP)

6. The current 5-year poverty reduction program in Guangxi is summarized in the document: “Guangxi Tackling Poverty Thirteen Five Year Plan”, issued in December 2016. It defines the poverty reduction strategy for the province to achieve the poverty eradication objectives of the National Thirteen Five Year Plan and the above-mentioned 2011 Outline. The regional 13th 5-Year Plan (5YP), sets a target of lifting all rural people out of poverty by 2020. Specifically, the 5YP sets its main goals to lift: (i) all 4.52 million registered rural poor people out of poverty (end-2015 figure); (ii) 5,000 remaining poor villages out of poverty status; and (iii) 54 poverty counties out of poverty status. The plan explains 10 areas of policy intervention, ranging from economic development, trade, employment and infrastructure, to education, health and social policy as well as ecological protection.

7. The above areas of policy are supported by 10 actions and 20 implementation plans which provide a detailed information about specific activities, expected results and indicative targets. The ten actions are targeted to poor households included in the NPRS: (i) poverty reduction through industrialization (*Chanye Fupin*); (ii) off-farm employment; (iii) ecological resettlement; (iv) improved education and vocational training; (v) improved health and medical care; (vi) ecological protection and compensation; (vii) rural social safety net (*Rural Dibao*); (viii) border trade and special policy for border areas development; (ix) resources mobilization for rural poverty reduction through social and corporate donations; and (x) livelihood and production infrastructure improvement.

8. The 5YP also outlines the institutional and financing arrangements for the implementation of poverty reduction programs, including: (i) establishment of a county level consolidated poverty reduction funding arrangements (CPRF); (ii) responsibility system for and performance evaluation of top leadership in poverty reduction at various levels of the government; (iii) participatory approach to empower the poor population in the implementation of poverty reduction programs; and (iv) improved monitoring and evaluation of results and impact of the poverty reduction programs, including the development of integrated data platforms and statistical information systems to improve the decision-making ability of poverty alleviation staff (Chapter 13 of the Guangxi 5YP includes explicit mention to these institutional arrangements).

9. In terms of funding of poverty alleviation programs, Guangxi Autonomous Region receives a significant contribution from the three main sources of central government funding to poverty reduction funds. As of 2015, of the total 46.1 billion allocated by central government funds to poverty alleviation efforts nationwide, 2.15 billion were received by Guangxi province (4.7 percent). In addition to this, the provincial government contributes an additional 48 percent and another 26 percent comes from county and cities budget for a total of 3.74 billion in the year of reference.⁵ However, from 2016 -first year of the National and Guangxi Five-year plans- there is a significant growth in the allocation of central funds to the provinces and, in addition, a new normative allows for a significant reallocation of funds to poverty reduction through the consolidated poverty reduction funds (CPRF). The consolidation of funds from different agencies that are related to poverty alleviation allows to facilitate management, concentrate efforts and increase the impact of poverty reduction efforts in Guangxi. Actually, poverty reduction efforts in Guangxi 5YP are not linked only to the budget, and implementation requires concentrated efforts from all stakeholders including government agencies (financed from budget), financial institutions and even the private sector.

⁵ Data from: State Council Leading group office of Poverty Alleviation and Development, Yearbook of China’s Poverty Alleviation and Development 2016.

C. Guangxi Consolidated Poverty Reduction Program and the “PforR”

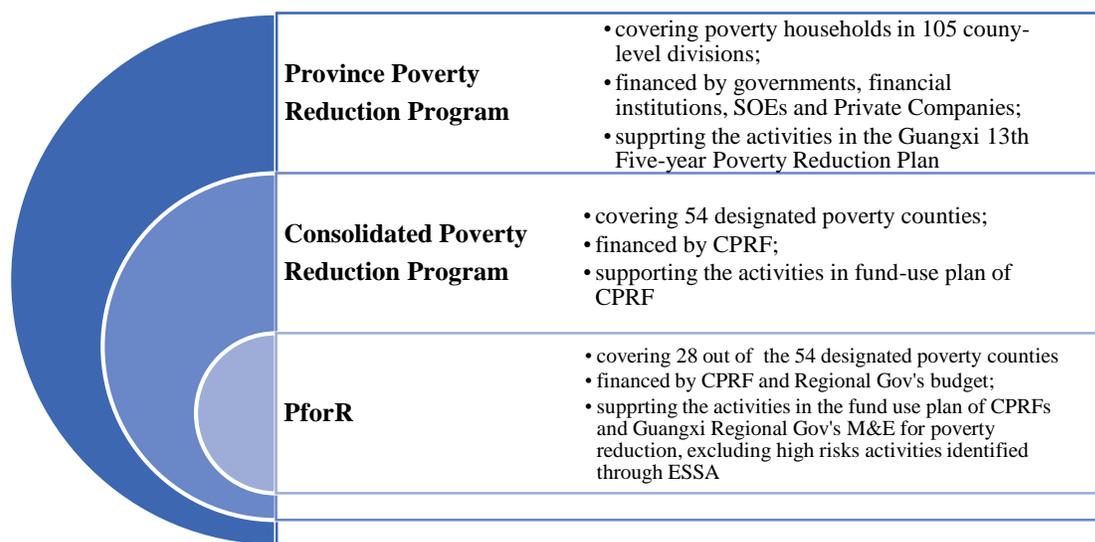
10. Within the Guangxi Poverty Reduction Program (GRPRP) lies the Guangxi Consolidated Poverty Reduction Program (CPRP), hereafter *the program*. The program represents a sub-set of the GRPRP in the following ways: (i) its geographic boundaries are provided by 54 designated national and provincial level poverty counties and (ii) expenditures are prioritized by the counties in conformance with the 13th 5YP Poverty Reduction Plan priorities and menu of expenditures. At the heart of the CPRP more integrated and locally-driven approach is an annual mechanism of bottom-up budgeting in designated poor counties for meeting their poverty reduction targets, coupled with transparent and accountable financing, monitoring and evaluation support from higher levels of government.

11. At the designated poverty county level, 40 plus earmarked funds from national, regional, municipality and county sources are pooled together to constitute the Consolidated Poverty Reduction Fund (CPRF). Under the program arrangements, the designated poor counties can prioritize expenditures under their annual fund use plan (AFUP) to better fit their local poverty reduction needs. These expenditure items need to be part of the “menu” of poverty reduction activities enumerated in the GRPRP, and must align to the Government’s poverty reduction indicator framework.

12. The use of consolidated poverty reduction funds (CPRF) is guided by the policy guidelines issued by the Central Government. These guidelines state that the consolidated funds would need to be targeted poor households included in the National Poverty Registration System and designated poor villages, and should not be used for financing medium and large-scale infrastructure projects. It also provides a negative list of activities which are not allowed under these funds. As part of the broad poverty reduction program, the government also instructed sectoral agencies to enhance the poverty reduction impact of their regular expenditure programs. Recurrent expenditures shall be thus financed from the corresponding sectoral earmarked budgets, and not from the CPRFs. As such, the GRPRP activities (v), (vi) and (viii) above (see paragraph 7) are generally funded through sectoral budgets, rather than under the CPRP. In addition, the Government has specifically requested that the proposed PforR excludes its ecological resettlement (activity (iii)) and Rural Dibao and related programs (activities (vii)). As a result, the CPRF mainly finances activities (i) poverty reduction through industrialization (Chanye Fupin), (iv) improved education and vocational training; and (x) livelihood and production infrastructure improvement.

13. The objective of the proposed PforR is to enhance the impact and efficiency of the Guangxi Consolidated Poverty Reduction Program (CPRP). The PforR will support a sub-set of the *program* activities, funded under the program consolidated budgeting arrangements -with some exclusions- and in a circumscribed geographic area. Moreover, this “PforR” will also support enhanced expenditure monitoring efforts that the region will be able to report on budget allocation and execution by its major subprograms (e.g., Chanye Fupin, rural infrastructure, etc.). Figure 1 illustrates the scope of the PforR within Guangxi’s government poverty reduction programs.

Figure 1: Government Program and PforR



14. The timeline of the PforR is 2018 – 2021, which are the remaining years of the 13th 5YP, and one additional year for verifying results. During preparation, specific targets to be supported under the PforR may be further defined or revised to ensure the improved contribution to the overall goal of poverty eradication.

15. The Government's program includes the CPRP in 28 targeted counties as well as implementation support and supervisory activities of Regional Government. The proposed PforR will complement the government program and is expected to emphasize more activities related to industrialization and vocational training (e.g. impact on livelihoods) and institutional systems improvement (e.g. efficiency enhancement of program implementation). The PforR excludes activities with potentially significant adverse impacts that are sensitive, diverse or unprecedented on the environment and/or affected people and activities and big value contracts according to the PforR Policy and Directive (see section on Environmental and Social Assessment below). Over the year 2018-2021 period, the total amount of the PforR expenditure framework is expected to be US\$5.53 billion, of which 93 percent will be financed by the Government and 7 percent by the IBRD Loan. The Government will fund US\$ 5.13 billion equivalent whereas IBRD loan will fund 400 million. See Table 1 below.

Table 1: Program Financing, 2018-2021

Source	Amount (US\$ Billion)	Share
Government	5.13	93 percent
IBRD	0.400	7 percent
Total	5.53	100 percent

16. As proposed by the Guangxi Poverty Reduction Office, the geographic boundary of this program for results operation (P4R) is circumscribed to 28 selected counties. Guangxi province has a total of 14 prefecture-level districts sub-divided into 110 county-level divisions. Of these, 54 are defined as either national-level or province-level poverty-stricken counties. These are the 54 counties that are the focus of the “Guangxi Tackling Poverty Thirteen Five Year Plan”. Among the 54 poverty-stricken counties, a subset of 28 has been chosen as the target of the proposed PforR. The selection of these 28 counties is based on the county having at least three out the following five criteria: (i) the county is a designated poverty-stricken county, (ii) the county has a poverty rate above 11 percent, (iii) the county has a poverty headcount of more than 60,000 people, (iv) the county has a good foundation for industrialization policy and/or (v) the county’s local government has expressed willingness in participating in the program.

17. Table 2: 28 selected poverty-stricken counties, Guangxi 2016

18. below lists the selected counties and their main characteristics

Table 2: 28 selected poverty-stricken counties, Guangxi 2016

	poverty headcount (10,000 people)	poverty rate	number of poverty stricken villages	Nationally designated county	County with more than 60,000 poor	County with poverty rate above 11%	county with potential for industrialization	county with interest for participation	selected county
Mashan	6.5701	14.17	68	√	√	√	√	√	⊙
Shanglin	6.3508	15.23	63	√	√	√	√	√	⊙
Rongshui	9.1164	20.60	84	√	√	√	√	√	⊙
Sanjiang	7.5217	20.71	77	√	√	√	√	√	⊙
Longsheng	2.2728	15.20	48	√		√	√	√	⊙
Tengxian	8.2381	8.72	86		√		√	√	⊙
Guiping	9.0922	5.35	115		√		√	√	⊙
Bobai	11.3087	7.46	113		√		√	√	⊙
Debao	6.5982	21.16	75	√	√	√	√	√	⊙
Jingxi	9.7744	16.52	36	√	√	√	√	√	⊙
Napo	4.4676	22.70	58	√		√	√	√	⊙
Lingyun	3.0192	16.09	113	√		√	√	√	⊙
Leye	3.3493	21.03	57	√		√	√	√	⊙
Tianlin	4.3941	18.45	74	√		√	√	√	⊙
Longlin	6.804	19.46	39	√	√	√	√	√	⊙
Zhaoping	5.5761	14.38	37	√		√	√	√	⊙
Fuchuan	3.6088	12.67	52	√		√		√	⊙
Tian'e	1.8723	11.93	62			√	√	√	⊙
Fengshan	3.5289	17.80	61	√		√	√	√	⊙
Donglan	4.7507	15.98	60	√		√	√	√	⊙
Luocheng	5.9711	17.90	41	√		√	√	√	⊙
Huanjiang	5.1167	15.72	104	√		√	√	√	⊙
Bama	4.37	16.62	63	√		√	√	√	⊙
Du'an	10.059	14.75	29	√		√	√	√	⊙
Dahua	6.0622	16.24	35	√	√	√	√	√	⊙
Xincheng	5.4215	13.70	25	√		√	√	√	⊙
Jinxiu	2.1323	16.24	28	√		√	√	√	⊙
Tiandeng	6.5752	17.51	46	√	√	√	√	√	⊙

Source: Data provided on November 2017 by Guangxi, Poverty Reduction Office.

19. To ensure the sharper focus on achieving the Government 2020 poverty reduction targets, the Result Areas of this PforR cover a key subset of the Government program activities, which are to the extent feasible aligned with the government’s own targets. The result areas were selected considering that they: (i) make a strong contribution to achieving the government’s 2020 poverty alleviation targets; (ii) must be linked to specific measurable results; (iii) provide “value added” in terms of interventions that are innovative, scalable or expand upon on-going and planned piloted initiatives; and (iv) incentivize behavioral changes. In particular, given these criteria, the focus of the activities to be covered under this PforR would fall into

three Result Areas that directly contribute to Guangxi poverty reduction programs: Result Area 1 aims at enhancing the impact of the program upon poverty reduction by boosting rural incomes through support to activities (i) and (iv) (that is *Chanye Fupin* and training programs); Result Area 2 also aims at poverty reduction through support to activity (x) (that is livelihood and production infrastructure); and Result Area 3 supports the whole CPRP through improvements in the systems of budgetary control, supervision and performance assessment that the Guangxi 13th 5YP also call as a priority in its poverty reduction efforts (see paragraph 8 above). Further content of each of these results areas is as follows:

20. Results Area 1. Improved Income Generation for Rural Poor. The goal is to contribute to enhancing the impact of the CPRP in raising rural incomes, including poor households. The types of measures to be supported under the PforR include:

21. Agricultural Industrialization (Chanye Fupin). Agriculture is one of the important industries for the poverty reduction for poverty alleviation in Guangxi. The agricultural industrialization approach aims to develop local agriculture-based industries through the development of economic opportunities for rural poor households in partnership with various stakeholders in the value chain.

22. The Government has issued the Circular on Improving the Certification and Management System of Poverty Reduction Leading Enterprises (PRLEs) in January 2018 (Document No. 62), and launched a program of certification of poverty reduction leading enterprises. This circular is expected to improve poverty targeting, which contribute to improved effectiveness and efficiency the government funding for agricultural industrialization programs through enterprise support. The primary goal of these programs is to encourage qualified enterprises to contribute to poor farmers to income growth through developing local agriculture-based industries, employing poor laborers for stable jobs, or establishing contractual relationships for raw material supply with poor household or their farmer cooperatives. Poverty reduction leading enterprises are expected to reach targets for number of participating registered poor, benefits or dividends distribution either to poor village collectives or poor farmer households. In return, these enterprises are eligible to receive supportive policies to develop agricultural industries, such as favorable loan terms, grants and subsidies, preferential tax policies, etc.

23. The proposed PforR would support scaling up the certification of the PRLE program which is expected to lead to increased enterprise purchases of agricultural raw materials, semi-processed or final products from farmers and farmer cooperatives as a link between farm and end-consumers. It will also support the government's on-going efforts to strengthen the role and capacity of cooperatives by developing existing and new cooperatives into Pro-poor Farmer Professional Cooperatives, which meet the operational standards and conditions needed to achieve the poverty impact as prescribed in the Cooperative Law. Finally, the proposed PforR would help the government to establish the appropriate M&E arrangements to track the poverty reduction impacts of its support programs.

24. Skills training. Skills training for poor rural households has been an historically an important avenue for escaping poverty in China. Recently the skills training programs in Guangxi have shifted from providing training for off-farm employment to providing skills for improved farming productivity and income as most surplus farmers had migrated to outside employment already. Specifically, the Ministry of Agriculture (MOA) initiated the *New Professional Farmers Development Program* in 2014 with the objective of making farming a more attractive profession and as a basis for local economic development. The New Professional Farmers Development Program is aligned with the local agricultural industrialization activities, albeit there is a room to enhance its poverty focus. Given the novelty of this program, the coverage of participating farmers is still relatively small

25. The proposed PforR would support the government in scaling up the number of farmers participating, and getting accredited, under the New Professional Farmers Development Program, by encouraging county

government to increase funding allocation for this skills training program from its CPRF budgets. It would also encourage the counties to increase the share of registered poor and woman in the skills training programs. The CPRF budgets could be used for capacity building for the training institutes including training of teachers and instructors on curriculum development and teaching methods, and to encourage knowledge-sharing activities to promote better program implementation in the targeted counties.

26. Results Area 2: Improved Infrastructure for Rural Poor. The goal is to ensure that poor households have adequate access to infrastructure projects funded under the CPRP, especially for rural drinking water supply and rural roads, which are part of the eight plus one criteria for lifting poor households from poverty status. The types of measures to be supported under the PforR include:

27. Drinking water supply. The 13th 5YP for Poverty Alleviation of Guangxi includes a wide range of investments for the water resources management in Guangxi, but only drinking water supply has been included in the PforR boundary as the funds for other water sector activities are allocated through the earmarked sectoral funds. The aim is to cover 85.7 percent of the total rural population in the region with drinking water access, among which 80.5 percent are expected to have household connection. The CPRF arrangements will mainly support the renovation and upgrading of small-scale rural drinking water supply schemes at village level. Depending on the priorities determined by the county governments, the funds could be used to support: (i) construction of new drinking water supply schemes; (ii) expansion of existing drinking water distribution networks; and (iii) renovation and/or upgrade of existing rural drinking water supply schemes.

28. The proposed PforR would support drinking water supply activities, which are targeted to registered poor households. The access to drinking water is defined as piped water supply connected to households and village water stands. Due to the variety of the different conditions of rural drinking water supply in the targeted counties, the actual water supply systems would be designed to fit all these different conditions. The water quality is expected to meet the applicable national drinking water standards. the Regional Center for Disease Control (RCDC) and its arms at county level carries out water quality tests of rural drinking water systems on an annual basis to monitor water quality to ensure the safety of water supply in the rural villages.

29. The proposed investments and activities for the rural safe drinking water are technically sound and the stated targets are achievable. Although the technology and engineering measures deployed under the safe drinking water supply program are conventional and mature (i.e. no major technical difficulties are foreseen), the introduction of some best practices, such as better technical guidelines and training of the county technicians, under this PforR operation could help to improve the qualitative aspects of the structures, such as improved design and operation and maintenance, to ensure sustainability of the rural safe drinking water supply systems.

30. Rural Roads. The Guangxi 13th 5YP for Poverty Reduction aims to achieve 100 percent road connectivity for all the natural villages in the 54 poverty counties in Guangxi by the end of 2020. Specifically, it lays out the following rural transport activities: (i) paving the remaining 249 administrative village roads (as documented in 2015) by 2020; (ii) widening of 1,150 km of rural roads; (iii) rehabilitation of 940 linear meters of damaged bridges; (iv) elimination of the potential rural road safety issues for 2,070 km; (v) construction of 1,230 km of productive roads (mostly for agriculture); and (vi) construction of passenger stations. In addition, the 13th 5YP sets a target of 100% road connectivity rate for all large natural villages (>= 20 households), meaning all such natural villages are expected to have a cement or gravel road by 2020. Furthermore, the mountainous conditions combined with seasonal rainfall patterns could result in floods and landslides, which could cause damage to rural roads.

31. The Government of Guangxi has a considerable experience in the delivery of rural road activities and has established solid operational procedures and technical standards for the delivery of its road infrastructure services. However, the technical assessment has identified the number of areas, and made recommendations, for further enhancement of the effectiveness of the rural transport programs. The PforR does not include a specific DLI related to rural roads due the fact that the government does not need extra incentives to meet its targets, given that CPRFs already allocate a significant share for rural roads investments. However, the technical assessment suggests that the qualitative aspects of rural roads improvements will be addressed through related Program Action Plan (PAP) action with the focus of enhance climate resilience of rural roads. The proposed PforR would therefore incentivize the government of Guangxi to prepare improved technical standards which could be adopted for rural road segments in high risk areas to mitigate this climate related risk.

32. Infrastructure Project Preparation. Under the CPRF arrangements, the total funds available for rural infrastructure investment has significantly increased, and eased the financing constraint of poverty reduction program. Nevertheless, given the tight implementation time of the government program, proactively selecting and preparing infrastructure projects is of great importance for achieving the poverty reduction goals as required by the central government. In addition, maximizing the poverty reduction impact of the program requires to ensure good quality of these investment projects.

33. The proposed PforR aims to strengthen Guangxi infrastructure project management capacity for improved poverty reduction outcomes. Guangxi has requested all designated poverty counties to accelerate the implementation of infrastructure projects by proactively selecting and preparing infrastructure investment projects in three-year pipeline. All pipeline projects should be in alignment with county poverty reduction plans, and necessary procedures of project proposal selection and assessments have been specified in the government circular. The selected pipeline projects are then recorded in a database. Only the projects in the database are eligible for being included in the CPRF Annual Fund Use Plan (AFUP). The pipeline projects are dynamically adjusted to reflect the changing poverty reduction priorities. Thus, it is critical to ensure that the three-year rolling pipeline database are concrete enough to secure adequate absorptive capacity and effective usage of the CPRF budget.

34. The proposed PforR encourages Guangxi to develop an IT-based pipeline infrastructure project management system, and deploy this system to all targeted counties. The proposed system would integrate processes of project preparation including data entry, review and approval, authorization, public disclosure, documents filing, etc. By doing so, it expects to strengthen the pipeline project quality control, enable real-time monitoring, and allow informed decision to better align infrastructure projects with the poverty reduction priorities and the needs of poverty households and villages.

35. Results Area 3: Cross-cutting Issues for Enhanced Program Implementation. The goal is to support improvement of the institutional arrangements and capacity for the delivery of the poverty reduction outcomes by enabling Guangxi to monitor and evaluate the proposed PforR implementation and the results achieved in a timely manner. The types of measures to be supported under the PforR include:

36. More efficient and effective program budget plan, execution and monitoring. Chinese central authorities have recognized the importance of the CPRF arrangements for achieving the intended poverty reduction results. In December 2017, the State Council issued an opinion to call for exploring the mechanisms to sustain the long-term impact of CPRF, which provides number of measures for improved budgeting performance, linking the fund use plan of CPRF with poverty reduction plan, empowering county governments in using the CPRF according to local poverty reduction needs and strategy, and improving the coordination of line agencies. Guangxi is already supporting number of mechanisms for improved annual budget prioritization, budget planning, execution monitoring, and performance evaluations. In addition, it

has taken steps to strengthening accountability of AFUP by poor counties through improved transparency and disclosure.

37. Under the proposed PforR, the Guangxi is expected to establish minimum standards for all county-level AFUPs, and ensure that their implementation reports can be enhanced against the AFUP details. These AFUP actions would translate both into a PforR DLIs, as well as PAP measures to support counties in the elaboration of their AFUPs. The AFUP process is expected to provide a venue for the counties to clarify how they will address the industrial and infrastructure indicators committed under the proposed PforR Result Areas 1 and 2. Moreover, this standard would also allow for better tracking and monitoring of budget allocations to where the gaps exist in terms of poverty reduction along the “eight plus one” poverty concept dimensions. Guangxi is also expected to extend under the PforR the CPRP budget horizon to three-year, conditioned on the availability of indicative budget allocation of CPRFs from the central government.

38. Better poverty M&E systems. The M&E actions of the Guangxi Poverty Reduction Program under its 13th 5YP are expected to enable regional and county PROs to know the poverty projects' performance under the program in terms of efficacy, efficiency and people satisfaction, as well as their results in terms of welfare under the multidimensional poverty approach. These M&E actions, allow the implementation of a double-loop learning. The first loop is aimed to the continuous verification if poverty projects that have been implemented comply with programmed standards in terms of coverage, efficiency and people satisfaction; and the second loop assess if welfare goals and strategy has been attained and whether it enables their modification in the light of the evidence and findings.

39. The proposed PforR would support the Guangxi poverty reduction program data platform consolidation. It would encourage the region to integrate the relevant datasets from various line agencies into its newly established data platform, improve its compliance with quality standards for data preservation, integration, security and dissemination, and enhance the roles and protocols for its use by main stakeholders of the poverty alleviation program at various levels of the public administration.

40. **In summary, the proposed PforR complements the CPRFs in a subset of poverty-stricken counties in a manner that enhances the CPRP impact and efficiency.** Based on the diagnostic of main causes of poverty in the targeted 28 counties (see Section II), the proposed PforR has an allocation of resources that stresses the CPRP impact or effectiveness through: (i) generation of incomes for rural households, by supporting productive partnerships between farmers and their cooperatives and agribusiness enterprises, strengthening institutional arrangements of farmer cooperatives and scaling up skills training programs; and (ii) better access to key rural infrastructure assets related to eight-plus-one poverty concept in Guangxi. The improved efficiency of the CPRP would be achieved through the better management and monitoring of the funds allocated to poverty reduction.

II. DESCRIPTION AND ASSESSMENT OF PROGRAM STRATEGIC RELEVANCE AND SOUNDNESS

A. Strategic Relevance

National Context

41. China's success in reducing extreme poverty since the economic reform period is widely recognized as an event of global significance. Based on the international poverty line of \$1.90 per day (expressed in 2011 purchasing power parity), the World Bank estimates that the incidence of poverty in China declined from 877.8 million in 1981 to 87.4 million in 2012 (or from 88.3 percent to 6.5 percent of the total population). These World Bank estimates indicate that about 790 million Chinese escaped poverty during this period, representing about 72 percent of global extreme poverty reduction. In fact, China is the first

developing country to achieve the United Nations Millennium Development Goal (MDG) of reducing the number of its people living in extreme poverty and hunger by half. These monetary estimates of declining poverty have been matched by broad-based improvements in nutritional status, educational attainment, longevity and other health outcomes, as well as other indicators of well-being.

42. Official government estimates indicate a similarly sharp and prolonged decline in the number of poor. Using China's rural poverty line of annual per capita net income below RMB 2,300 (at 2010 constant prices) the number of poor people living in rural areas declined by nearly 735 million individuals from 765.4 million in 1980 to 30.5 million in 2017, or from 96.2 percent to 3.1 percent of rural population (Table 3).

Table 3: Official estimates of Poverty in China, 1980-2017

Year	Number of Rural Poor (million)	Annual Reduction (million)	Official poverty rate ¹ (%)
1980	765.4		96.2
1990	658.5	10.7	73.5
2000	462.2	19.6	60.5
2010	165.7	29.6	49.8
2017	30.5	19.3	3.1

Source: National Bureau of Statistics China, *2016 Poverty Monitoring Report of Rural China* and *Statistical Communiqué of the People's Republic of China on the 2017 National Economic and Social Development*.

¹ Poverty rate expressed as a share of registered rural population (as opposed to a share of the total population).

43. The majority of the remaining rural poor are concentrated in some well-defined areas. The government's analysis concludes that rural poverty is "mostly distributed" in the 832 nationally designated poor counties and the remaining 128,000 nationally designated poor villages. Of the around 70 million included in the National Poverty Registration System (NPRS) in 2013, some 50.7 million (or 61.5 percent) resided within the nationally designated poor counties. The government's data indicates that some 88.7 percent of the 43.35 million rural poor in 2016 resided in the western (51.9 percent) and central (36.8 percent) provinces. Half the rural poor concentrate in only seven provinces. The top seven provinces/regions by number of poor in 2016 are shown in Table 4: Guangxi Autonomous Region is one of them.

Table 4: Top five provinces by number of poor in 2016

Rank	Province/Region	Number of Poor	
		Number (million)	Share of National Poor (%)
	National Total	43.35	100.0
1	Guizhou	4.02	9.27
2	Yunnan	3.73	8.60
3	Henan	3.71	8.56
4	Hunan	3.43	7.91
5	Guangxi	3.41	7.87
6	Sichuan	3.06	7.06
7	Gansu	2.62	6.04

Source: National Bureau of Statistics China, *2017 Poverty Monitoring Report of Rural China*

Guangxi Regional Context

44. Guangxi has experienced an important reduction of rural poverty in recent years. Between 2010 and 2016, rural poverty headcount fell from 10.12 to 3.41 million people, while the rural poverty rate declined from 24.3 to 7.9 percent. However, during this period, Guangxi's share within total rural poor in China rose from 6.1 percent to 7.9 percent. This is due to Guangxi having a slower poverty reduction rate than the national average. While China had a poverty reduction rate of 20 percent per year, Guangxi had only a 16.6 percent annual decrease for the same period. Consequently, Guangxi is still one of the 6 provinces in China with rural poverty rates above the 7 percent mark and, given its population size, is one of the six provinces with more than 3 million rural poor (as of 2016).⁶ Guangxi is certainly an important area in the battle to eradicate poverty in China by 2020.

45. Poverty eradication in China refers not only to help people earn more than a minimum income threshold, but also have access to basic goods and services that improve wellbeing on their own and help further increase household earnings. The figures in the previous paragraph only refer to monetary poverty as measured by the national official poverty line of 2,300 RMB per person per year (in 2010 prices). But the Guangxi Tackling Poverty 13th Five-year Plan also aims at achieving goals related to access to housing, basic health care, compulsory education, appropriate roads to villages, safe drinking water, access to electricity, access to telecommunications (e.g., a TV set), having a regular source of income and such income being above the minimum poverty threshold. This is akin to a multi-dimensional definition of poverty, which is defined in Guangxi as the 8+1 "haves". In these areas, Guangxi still has room for improvement. While access to electricity is high at 99.9 -among the highest across all provinces- only 85.3 of the villages have functioning primary schools (relatively low compared to other provinces).⁷ The poverty figures in the rest of this TA refer to poverty rates as computed by Guangxi Poverty Reduction office, which take into consideration these dimensions of poverty.⁸

Profiles of poverty in Guangxi province

46. The 28 selected counties are representative of the rural poor in Guangxi in its geographic location. As of 2016, the selected counties account for 10.9 million rural population, which represents approximately 43 percent of the rural population in the province; and for 1.6 million rural poor, which represent approximately 41 of the rural poor in the province.⁹ Moreover, the selected counties include 9 out of the 12 autonomous counties (which sit specific ethnic minorities). The geographic distribution of the counties includes counties near the border with Vietnam, and counties in the mountain ranges of the north of the province (bordering Yunnan, Guizhou and Hunan provinces), as well as one county bordering Guangdong province to the east. No counties, however, are included limiting the gulf of Tonkin, which is perhaps the most prosperous area of the province. Most selected counties are in mountain areas, and a few in the river plains at the center of the province. The three counties selected for the technical assessment also exemplify this geographic diversity: one autonomous county (Du'an), one county in the mountain range (Tianlin) and one county in the river plains (Tengxian). As will be explained later, these three counties are also diverse in terms of their ethnic minority composition.

47. In terms of age composition, the selected 28 counties are not systematically different from other poverty counties. Children in poverty in most of the 28 counties represent between 20 and 30 percent of the poor population, a percentage that is not systematically different from the share of children in other poor

⁶ Data for 2015 from National Bureau of Statistics of China (2016), *Poverty Monitoring Report of Rural China 2016*, tables 8-1-2 and 8-1-3.

⁷ Data refers to poverty stricken areas only. Op. Cit., tables 8-2-8-, 8-2-10 and 8-2-11.

⁸ No disaggregation of poverty rates by each of the 8+1 components is available.

⁹ World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office.

counties (**Error! Reference source not found.**2, top left panel.) Similarly, the share of elderly among the poor ranges between 10 and 15 percent for most counties, without systematic difference between selected and non-selected poverty-stricken counties (**Error! Reference source not found.**2, top right panel). There is no evidence of age composition having an association with poverty rates in the 28 counties, vis-à-vis other poverty counties in Guangxi.

48. The share of adult females (aged 15 to 64) among the poor is particularly low in all poverty counties. The share of adult females represents between 25 and 30 percent of the poor in all poverty counties, which involves that the share of adult men is on average 7.8 percentage points higher (**Error! Reference source not found.**2, bottom left panel). The male/female ratio in poverty counties is 112.3, which is slightly higher than the province average of 111.61, as of 2016. This evidence seems to indicate that there are no gender imbalance differences between selected and non-selected poverty counties, although poverty counties seem to have a slightly more imbalanced gender ratio than the rest of the province.¹⁰

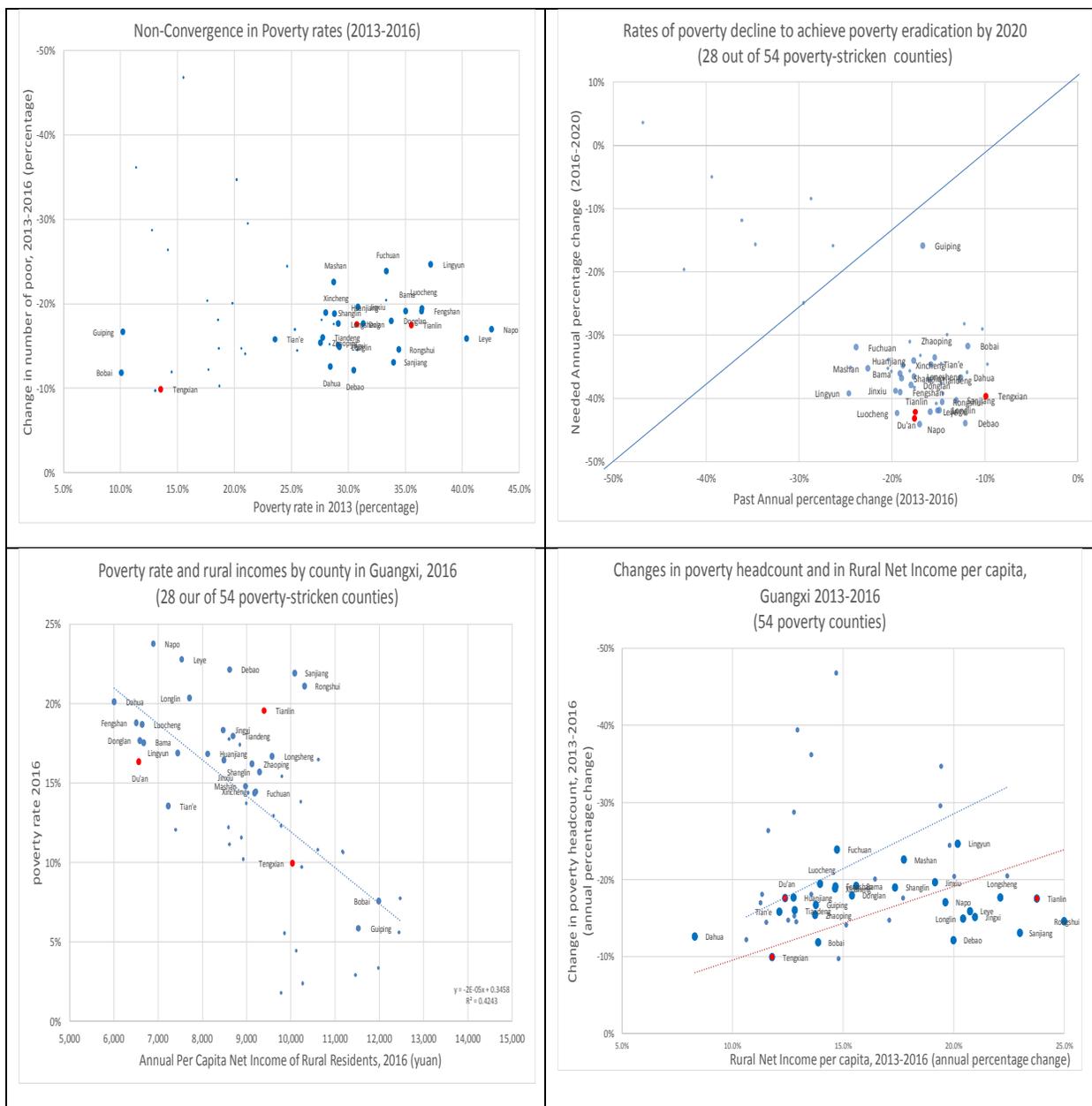
49. Most of the selected poverty counties have ethnic minorities representing more than 80 percent of the population in poverty. Only 4 out of the 28 counties have a proportion of minorities below 10 percent (Tengxian is one of them). Another 5 have ethnic minorities representing around half the poor (Tianlin is one of them). The rest of the selected counties have ethnic minorities representing more than 80 percent of the poor, and in some cases even more than 90 percent (Du'an is a case). However, many non-selected poverty counties have very high proportions of ethnic minorities in its poverty population, which indicates that ethnic composition is not a determinant of poverty rate, nor selection of poverty counties (**Error! Reference source not found.**2, bottom right panel).¹¹ The proportion of ethnic minorities among the poor in the 28 counties is 67.6 percent, slightly higher than in non-selected counties (63.9 percent).

Dynamics of poverty in Guangxi province

50. Selected poverty counties have not experienced a faster poverty reduction than other poverty counties. Despite having higher poverty rates -and in some cases an even larger poverty headcount- the selected 28 counties have had an annual rate of decline in the number of poor similar to the rest of the counties in Guangxi. **Figure 3: Dynamics and drivers of poverty reduction in selected counties, Guangxi 2013-2016**

¹⁰ World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office. Regional male/female ration comes from Guangxi Statistical Yearbook 2017 (table 2.1). The staff did not have access to the sex distribution of children in poverty. Assuming a 50-50 distribution we compute the 112.3 male/female ratio among the poor. A more imbalanced gender population for children would lead to a higher index among the poor in general, making our estimate conservative.

¹¹ A linear regression of rural net income on ethnicity renders a R2 of 0.03 and a non-significant correlation coefficient. The Pearson correlation coefficient between the two variables is -0.179.



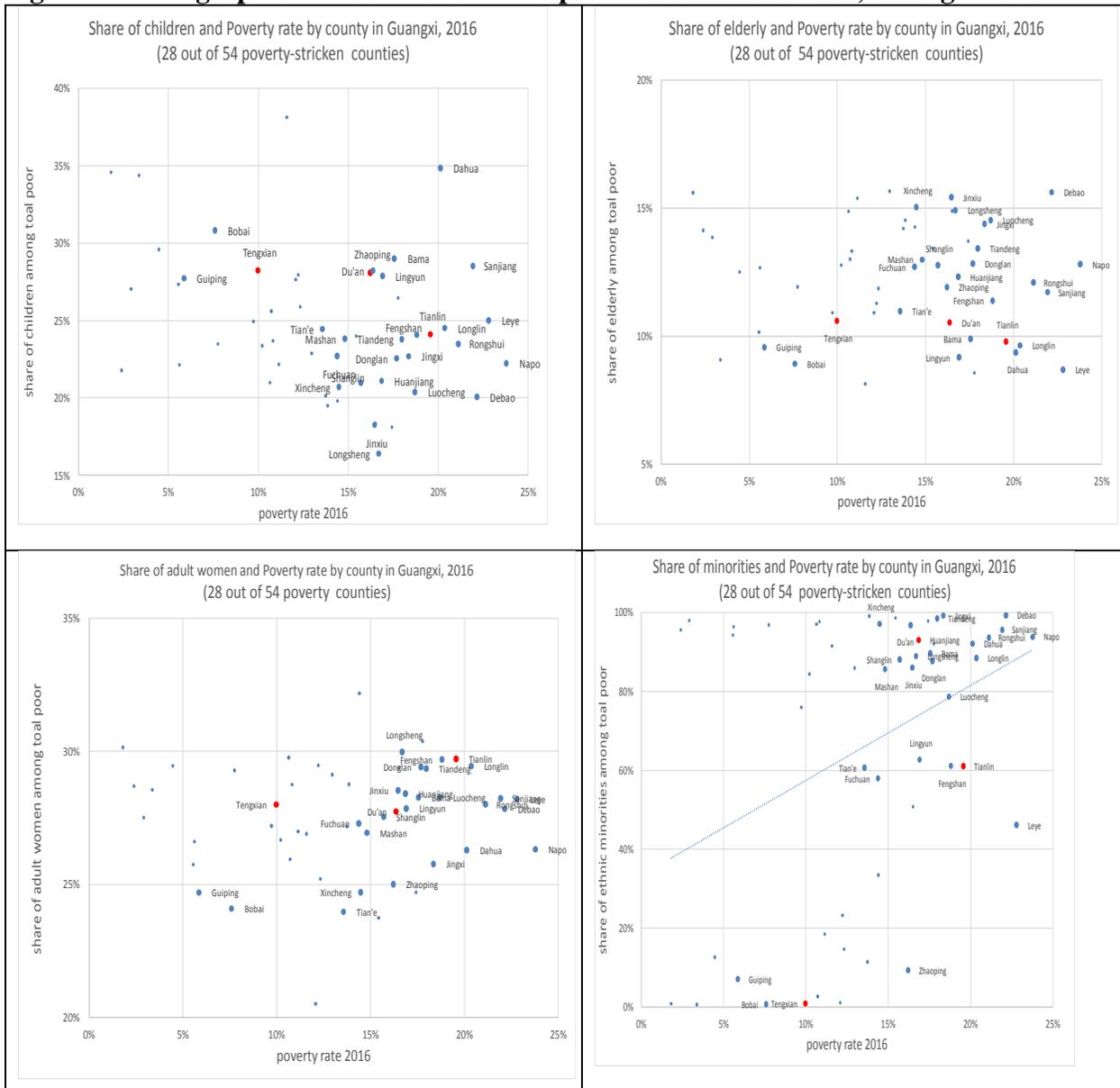
Source: World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office and Guangxi Statistical Yearbook 2014 and 2017

Note: Red dots identify Technical Assessment sample counties.

51. 3, top left panel, shows that the annual rate of decline in the number of poor for the period 2013-2016 ranges from 10 to 25 percent for the large majority of the counties, regardless of initial poverty rate.¹² Only 5 counties had experienced faster poverty reduction rates; all of them had comparatively lower poverty rates and none is among the selected 28. This involves that there has been no convergence (i.e., poorer counties reducing poverty faster) and that the selected counties need to do an additional effort to reduce poverty to levels similar to other counties.

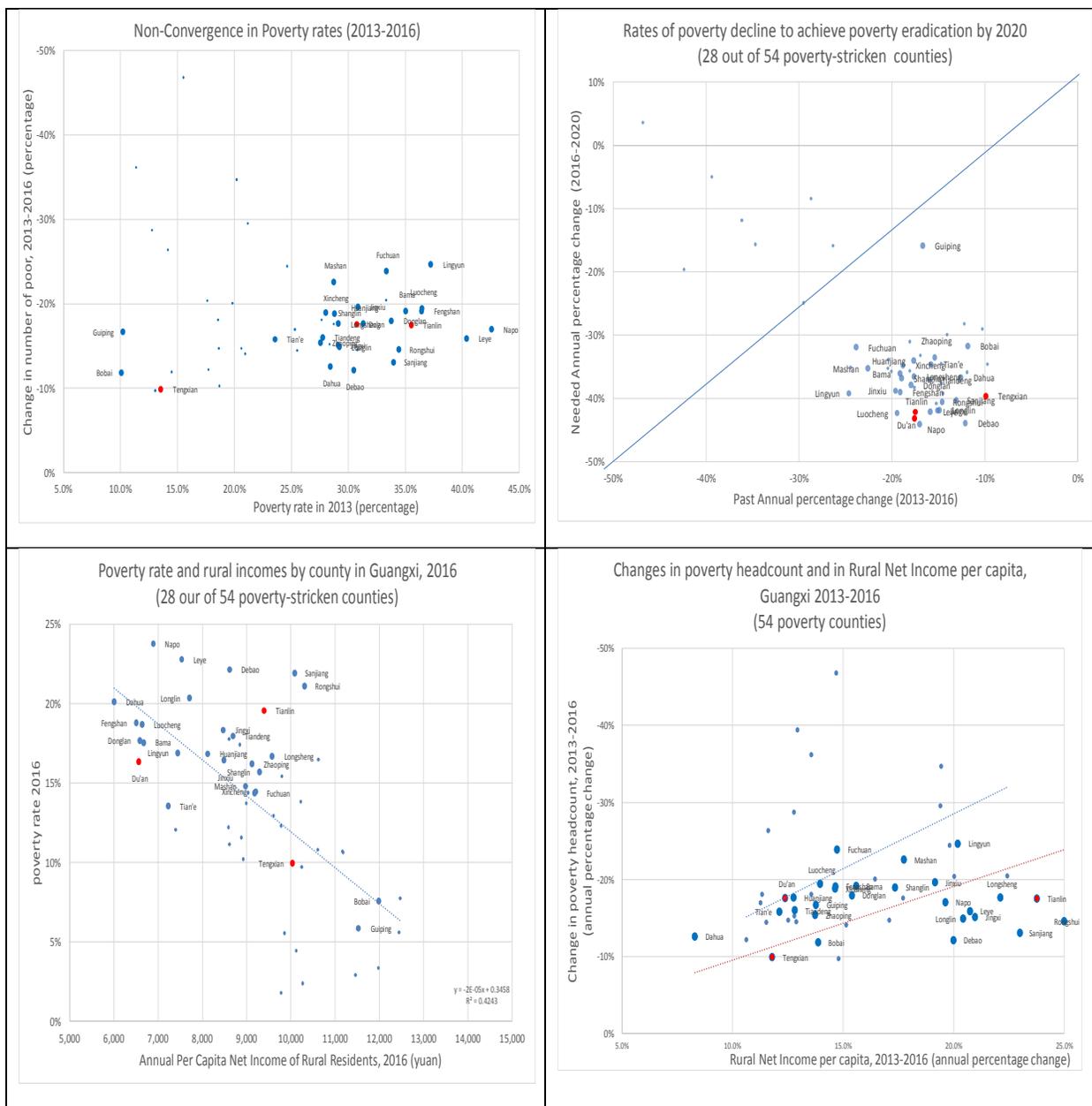
¹² A qualitatively similar figure if using initial poverty headcount or percent changes in poverty rates.

Figure 2: Demographic characteristics of the poor in selected counties, Guangxi 2016



Source: World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office.
 Note: Red dots identify Technical Assessment sample counties.

52. Moreover, the past rates of poverty reduction seem insufficient to achieve the goal of poverty eradication by 2020. Figure 3: Dynamics and drivers of poverty reduction in selected counties, Guangxi 2013-2016



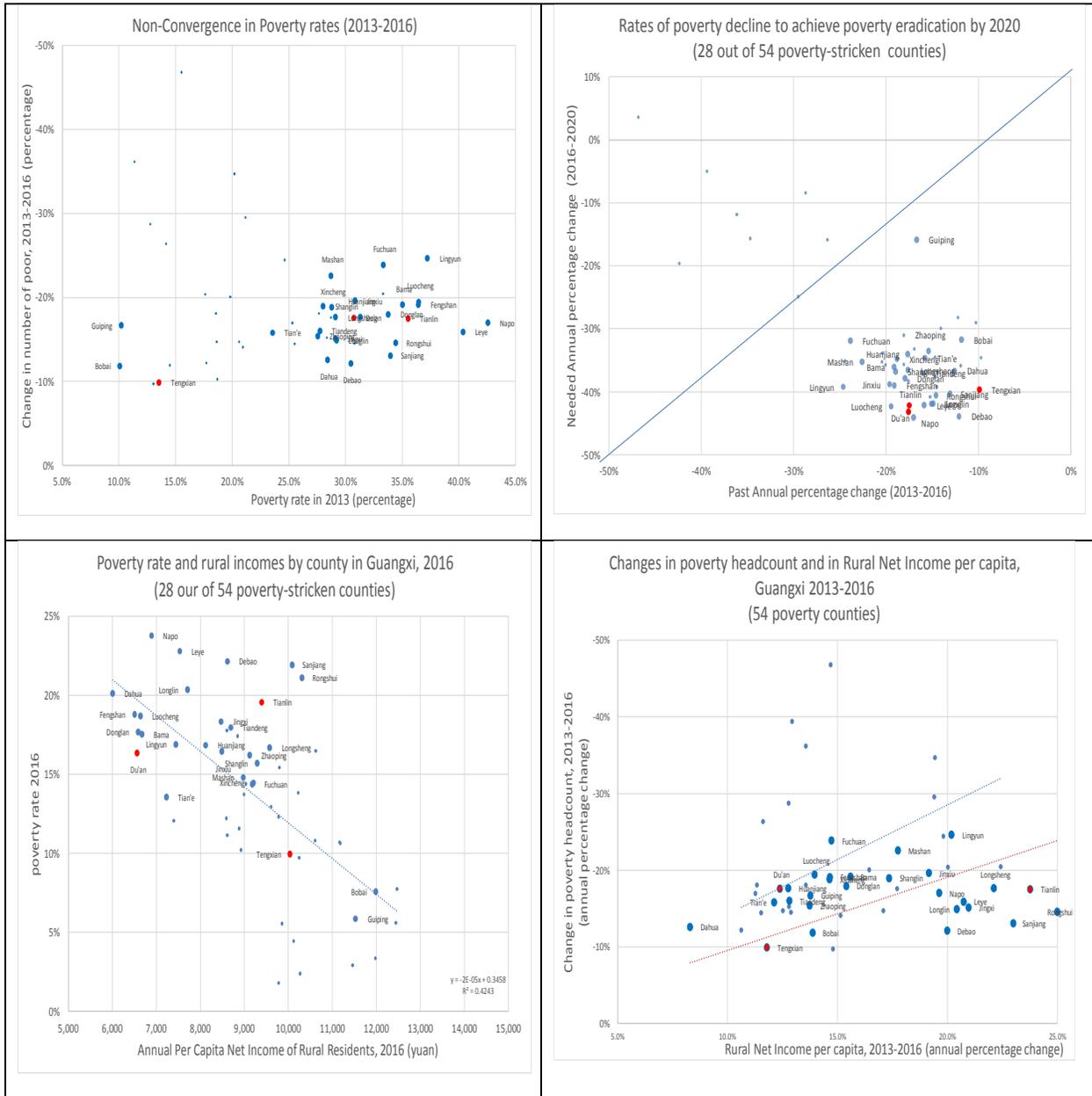
Source: World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office and Guangxi Statistical Yearbook 2014 and 2017

Note: Red dots identify Technical Assessment sample counties.

53. 3, top right panel, shows that almost every poverty-stricken county (both selected and non-selected) are below the diagonal line, meaning that, to achieve poverty eradication, poverty reduction rates for the period 2016-2020 have to be faster than the ones experienced in the period 2013-2016. As indicated above, most counties experienced rates of poverty reduction between 10 and 25 percent per year in the past, but to eradicate poverty (i.e., a poverty rate of 3 percent of the county’s rural population by year 2020) yearly rates should be between 30 and 40 percent in the following four years.¹³

¹³ For this projection, World Bank staff estimates the rural population by year 2020 in Guangxi using the rates of growth of rural population in each county for the period 2013-2016. Then a 3 percent of the projected rural population

54. Poverty levels and poverty reduction are closely linked to rural net incomes. Figure 3: Dynamics and drivers of poverty reduction in selected counties, Guangxi 2013-2016



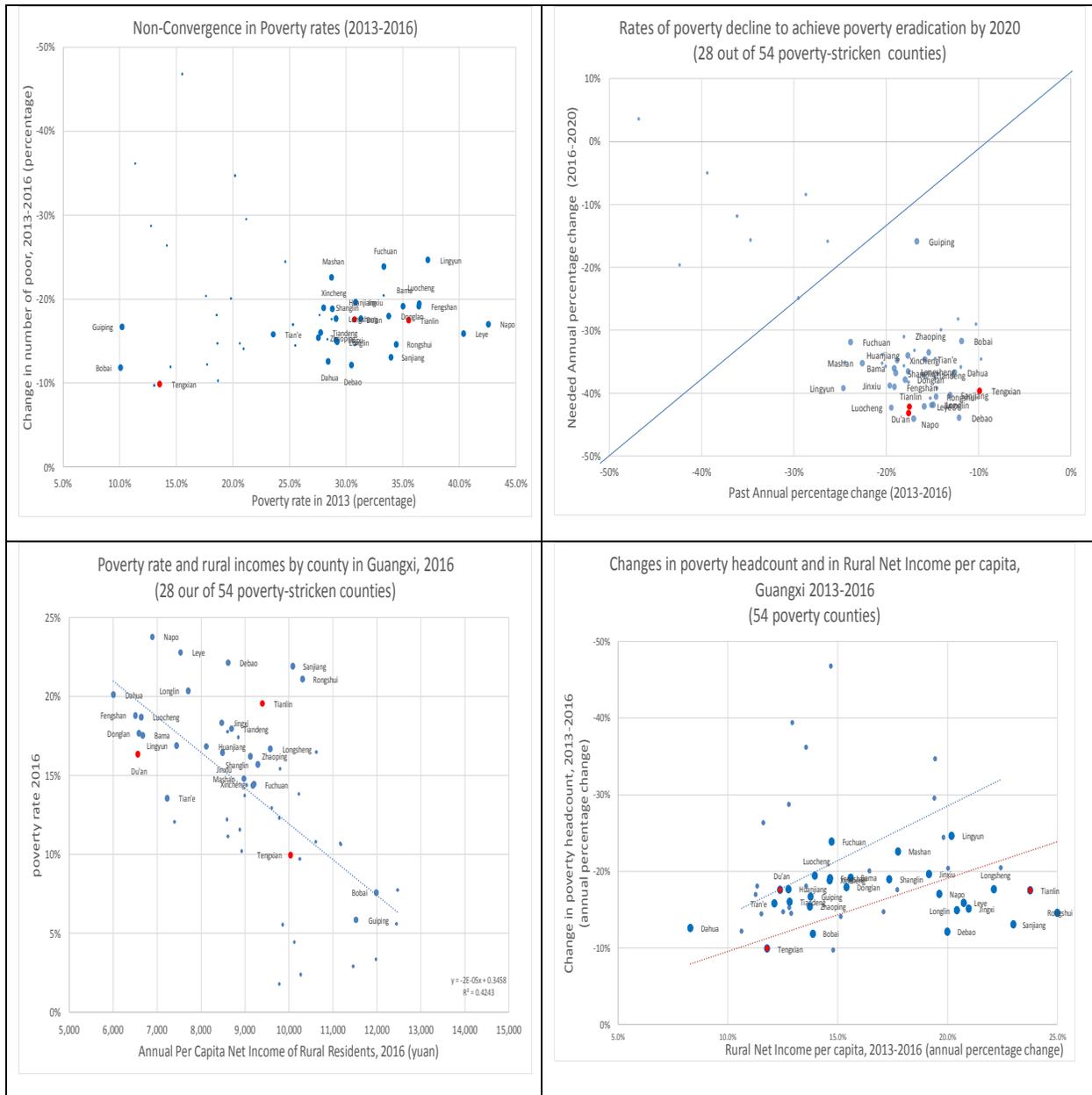
Source: World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office and Guangxi Statistical Yearbook 2014 and 2017

Note: Red dots identify Technical Assessment sample counties.

55. 3, bottom left panel, clearly shows a downward trend between poverty rates and net income per capita in rural households. Most of the 28 selected counties have net income per capita below 9,000 yuan per year, whereas other counties with lower poverty rates have higher rural net incomes. Approximately,

in 2020 is taken as the eradication goal for each poverty county and compared to population in poverty as of 2016 as per poverty data provided by Guangxi Poverty Reduction Office.

an increase of 1,000 yuan per year in rural net income per capita is associated with a 1 percent decline in poverty rates.¹⁴ The data also shows differences in this impact between selected and non-selected poverty counties (Figure 3: Dynamics and drivers of poverty reduction in selected counties, Guangxi 2013-2016



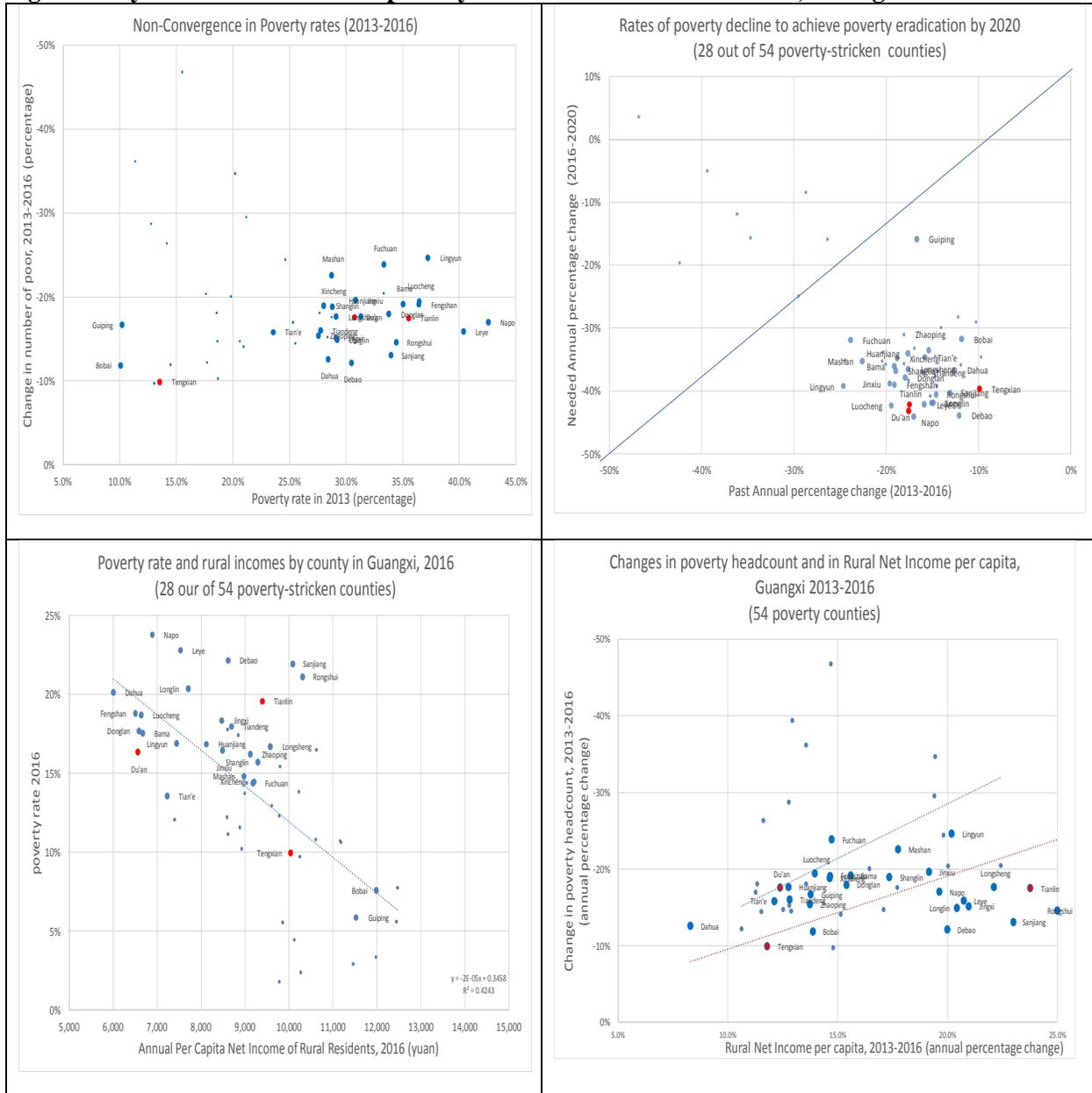
Source: World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office and Guangxi Statistical Yearbook 2014 and 2017

Note: Red dots identify Technical Assessment sample counties.

¹⁴ Based on a linear regression of poverty rates on rural net incomes, with a R2=0.42 and using data for 51 counties for 2016. Cangwu, Longxu counties and Pingui district were excluded because they were not comparable between 2013 and 2016.

56. 3, bottom right panel). The growth in rural net incomes has a larger impact upon poverty reduction in non-selected than in selected counties: a 10 percent increase in rural net incomes is associated with a 4.4 percentage point poverty reduction in non-selected counties but only a 1.3 percent percentage point reduction in selected counties.¹⁵ . This evidence -and the one in the two previous paragraphs- validates the proposed PforR focus on supporting the selected 28 counties, not only because of their deeper levels of poverty, but because these are the counties that need to make an extra effort and hence need additional financial and technical support.

Figure 3: Dynamics and drivers of poverty reduction in selected counties, Guangxi 2013-2016



¹⁵ Based on a linear regression of changes in poverty rate on changes in rural net incomes per capita, using data for 51 counties (28 selected and 23 non-selected) for years 2013 and 2016, with R²

Source: World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office and Guangxi Statistical Yearbook 2014 and 2017

Note: Red dots identify Technical Assessment sample counties.

57. Agricultural activity seems to be the main driver of the impact of rural net incomes upon poverty reduction. Rural net income is a combination of different sources of income. It includes wages, farm and other business incomes as well as transfers. An exploration of linear relations between poverty reduction -on the one hand- and output productivity in agriculture, industry and services by county, public expenditures per capita and number beneficiaries of rural dibao -on the other- as proxies for the components of net income, rendered significant associations only for agricultural productivity. If running a multiple regression, rural net income is the only variable statistically significant associated to poverty reduction, with agricultural productivity and government expenditure per capita following in terms of impact size and statistical significance (Table 5). This evidence points to the importance of enhancing rural net incomes through increasing agricultural productivity to accelerate poverty reduction. Moreover, the relative significance of government expenditures per capita seems to indicate the relevance of public services and public investments in utilities which are also part of the poverty measures (i.e., 8+1 “haves”) in Guangxi.

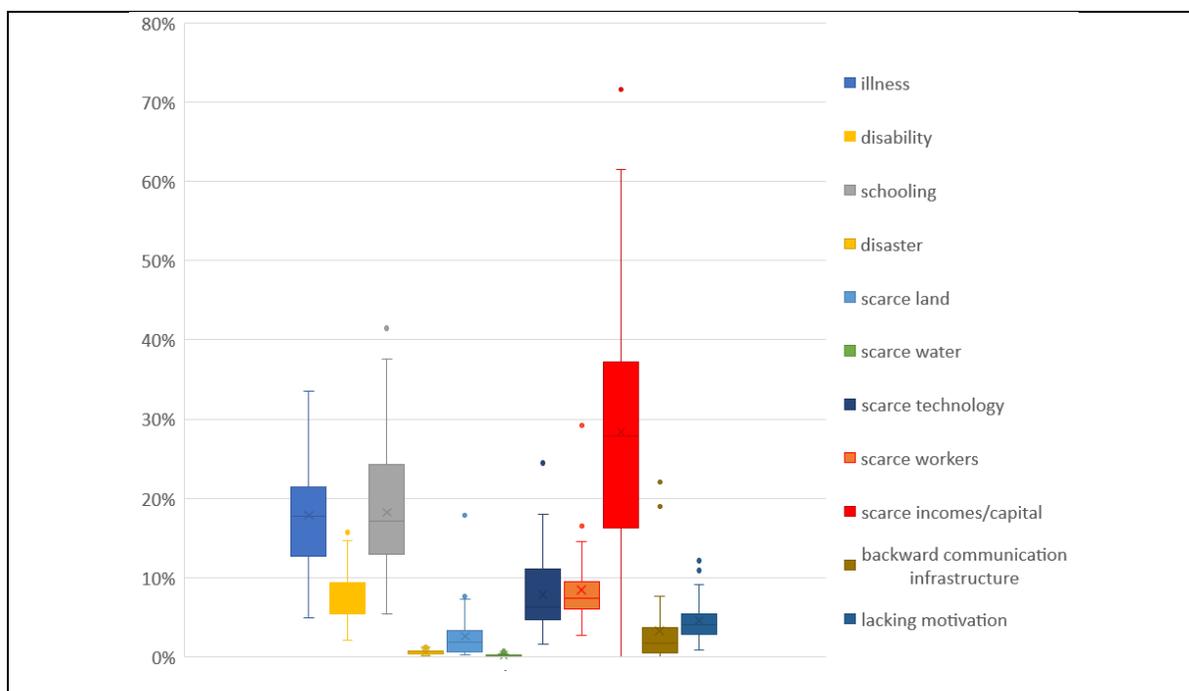
Table 5: Multiple regression of policy variables upon changes in poverty, selected counties, Guangxi 2013-2016

<i>Regression Statistics</i>							
Multiple R		0.4555					
R Square		0.2075					
Adjusted R Square		0.0969					
Standard Error		1.3965					
Significance F		0.1069					
Observations		50					
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	
Intercept	-0.32	1.26	-0.26	0.80	-2.87	2.22	
change in productivity by sector:							
Primary Industry	-3.68	3.11	-1.18	0.24	-9.95	2.60	
Secondary Industry	0.40	0.56	0.71	0.48	-0.73	1.53	
Tertiary Industry	0.00	1.09	0.00	1.00	-2.19	2.19	
change in Gov. expenditures	-2.27	1.47	-1.55	0.13	-5.22	0.69	
change in rural dibao	-0.08	0.16	-0.49	0.63	-0.39	0.24	
rural net income growth rate	-11.59	5.50	-2.11	0.04	-22.69	-0.49	

58. Poor households themselves provide additional evidence about the importance of net incomes as the main driver of poverty reduction in Guangxi. The *Accurate Poverty Reduction Database*, a compilation of demographic and socio-economic characteristics of the poor population collected nationwide since 2013, gives a detailed picture of the characteristics of the poor in China. In addition to geographic and demographic characteristics, discussed in previous paragraphs, this database also includes questions about causes for poverty status. When asked about the main cause of their poverty status, lack of income/capital was the cause mentioned more often (an average of 28 percent of responses across 54 counties in Guangxi), followed by health and schooling expenditures (18 percent and 17 percent of the responses, respectively) and then by access to technology (8 percent of responses). Households in poverty, however, hardly ever indicated inappropriate roads or lack of access to water as the main cause of poverty

(2 percent and 0.1 percent of responses, respectively).¹⁶ However, these infrastructure assets are still part of the eight plus one poverty criteria. Figure 4 illustrates the distribution of answers to main cause of poverty across 54 poverty-stricken counties in Guangxi province.

Figure 4: Distribution of main cause of poverty, 54 poverty stricken counties, Guangxi 2016



Source: World Bank Staff estimates based on poverty data provided by Guangxi Poverty Reduction Office.

Gender equality

59. At national level, a gender gap in vocational schools exists. Moreover, according to the Chinese women’s social status survey, the gender pattern of labor skill procession is differentiated in rural area in China. Fewer women possess farm skills than men, only 24 percent of rural women got the planting management skills, 6 percentage lower than that of men, and there are about 1.5 percentage gender gap in the possession of stockbreeding skills. Following the project will establish necessary mechanisms to ensure that female and male farmers equally benefit from the services offered by the project.

60. In 2010, 16.6 percent of women aged 18-64 participated vocational training programs during past 3 years, which is 2.7 percent lower than male counterpart. In 2012, girl’s proportion was less than 50 percent in vocational schools, and less than 30 percent in technical schools (the Chinese women’s social status survey).

61. In general, gender related policy and regulation has been established in China, Guangxi Autonomous Region and local government. These can be found in the documents like The Views of the State Council on Further Mobilizing Social Forces to Participate in the Development of Poverty Alleviation, 2014, and

¹⁶ Data from *Accurate Poverty Reduction Database* for a selection of 54 counties in Guangxi province, as collected and processed by staff at the Guangxi Poverty Reduction Office. It should be noted, however, that the questions do not refer to quality of roads, water supply, or any other public utility or service, but simply to access. Moreover, the rank refers to “main” poverty cause, not to “only” poverty cause. Hence, despite not being ranked as “main” cause of poverty, access to safe drinking water or paved roads may still be a prevalent gap among the poor in selected counties.

Guangxi 13th Five-Year Plan of Poverty Alleviation,2014. A key player is the Women's Union. The Women's Union provide qualified personnel and adequate working resources to safeguard women's rights and promote gender equality. The union has experience in organizing a series of activities to enhance the ability of poor women to lift themselves out of poverty and self-development.

B. Technical Soundness

Results Area 1. Improved Income Generation for Rural Poor

62. This Results Area aims to increase the direct impact on the incomes of the targeted poor households. The goal is to contribute to enhancing the impact of the government poverty reduction expenditures programs under consolidated funds in raising rural poor households' income, particularly through improved targeting of the selected activities supported under the proposed PforR. The total industrial development (Chanye Fuping) classified activities made up about 39 percent of the CPRF budget for 28 targeted counties in 2017. The activities supported under the CPRFs include the following measures: (i) village collective economy – grants to poverty villages to engage in productive activities as cooperatives and through partnerships with enterprises. The aim is to generate return which would provide income to poor households on sustained basis; (ii) reward payments to poor households to encourage their participation in productive activities either through cooperatives, enterprises or individual basis; (iii) forest farm and ecology – input subsidies for tree crops and tree plantations; (iv) micro-credit to households to encourage their participation in productive activities either through cooperatives, enterprises or individual basis covers the following activities under its industrial development; and (v) support to farmer cooperatives and enterprises. The activities (i) to (iv) are closely related to the development of farmer cooperatives and enterprise support as the farmers benefitting for these support measures are expected to participate in the agricultural industrialization opportunities provided by farmer cooperatives and enterprises (i.e. they are inputs to the cooperative and enterprise support activities). Given that direct support to cooperatives and poverty reduction enterprises makes up a relatively small share of the CPRF budgets in the targeted counties (about 2.6 percent in 2017), the proposed PforR would encourage: (i) increased allocation of the CPRF funding towards development of farmers cooperatives and poverty reduction leading enterprises as a way to ensure more sustainable outcomes of the government income support spending activities; and (ii) enhance the institutional mechanisms associated with these two programs for improved poverty targeting and fund-use efficiency through introducing poverty reduction accreditation mechanisms for the enterprises and improved operational standards, benefit sharing arrangements and poverty targeting of farmer cooperatives. In addition, the proposed PforR would support skills training activities (i.e. skills training activities for rural poor for improved productivity), through significantly scaling up the selected vocational skills training activities, and improving poverty and gender targeting of these programs.

63. The Result Area would contribute to climate co-benefits through incentivizing PRLEs to utilize climate-smart technologies in crop and livestock production systems. This aims to help increase resilience of the agriculture sector to potential climate variability-induced floods and water scarcity conditions, and to contribute to GHG emission reductions through reduced use of N fertilizers, improved manure management and increased vegetation cover (especially through planting tree crops on presently barren hill slopes). This Result Area would also encourage the adoption of these technologies by farmers and farmer cooperatives from whom the PRLEs purchase agricultural raw materials and livestock products through contractual relationships and provision of climate-resilient operations advice to farmers. It will also encourage adoption of climate smart agriculture technologies and practices in cooperative operational standards (i.e. proper cropping patterns and optimized planting dates, intercropping -- especially for tree crop plantations -- and the use of drought-tolerant new varieties, among others). Finally, it would incentivize the inclusion of climate smart agriculture and livestock practices and technologies into New Professional Farmer Development Program training curricula.

i. Agricultural Industrialization (Chanye Fupin)

64. Introduction. Agriculture has had an important role in poverty reduction in China. Research carried out by the World Bank shows that the primary (mainly agricultural) sector was the main driving force in China's spectacular success in poverty reduction, rather than the secondary (manufacturing) or tertiary (services) sector. In fact, agricultural growth had a four times greater impact on poverty reduction in China than growth in the secondary and tertiary sectors¹⁷. The analytical findings of the technical assessment further confirm that agricultural activities have been one of the main drivers of the impact of rural net incomes upon poverty reduction in poverty-stricken counties in Guangxi (see section II.A above).

65. Scaling up agriculture as a key strategy for rural poverty reduction has been incorporated in the national plan for achieving agricultural and rural economic growth, and the concept of agricultural industrialization was introduced to the poverty reduction strategy. In 1997, the Method for the Management of National Poverty Reduction Fund, promulgated by the State Council specifically mentioned that "the implementation of poverty reduction projects should take industries that can increase the income of poor households as an important content". In 2001, the Central Party Committee and the State Council issued the Outline of Rural Poverty Reduction (2001-2010), in which the concept of poverty reduction through industrialization - *Chanye Fupin* (CYFP) - literally, to use agricultural industrialization to alleviate poverty was officially proposed, along with integrated development of village infrastructure and skills training, especially for migrant labor.

66. Along with the continuing promotion of agricultural modernization, the emphasis on CYFP further deepened during 2010s. The ongoing 2011 Outline called for efforts be made to foster "targeted pillar industries to lead poor households to income growth", and to support "leading enterprises, farmers' cooperatives and mutual aid fund organizations that will lead and assist poor households to develop production". In 2012, the "Regulations for the Preparation of Industrialization Poverty Reduction Plan in Concentrated and Contiguous Poverty Areas", which required provinces to develop CYFP plans and to use over 70 percent of earmarked poverty reduction funds to support CYFP. In 2016, the 13th 5YP placed poverty reduction through industrialization at the top of the eight key programs for poverty reduction. In May of the same year, nine agencies including the Ministry of Agriculture, the National Development and Reform Commission and the Poverty Reduction Office of the State Council jointly issued the Guiding Opinions of Promoting Accurate-targeting Poverty Reduction through Developing Targeted Industries in Poverty Areas, which laid out specific contents and development objectives for promoting CYFP.

67. Strategic Relevance. Agriculture is one of the important industries of Guangxi for the poverty reduction. The 13th 5YP of National Economic and Development Outline of Guangxi listed featured agriculture industries as important measure of promoting agricultural modernization in Guangxi. Subsequently, the DoA of Guangxi has developed the Agricultural Industry Development Plan, which establishes the blueprint for the development of priority agricultural industries and their county-level expected production scales during the 13th 5YP. As in other provinces, CYFP is seen in Guangxi as one of the important approaches for poverty alleviation. The Plan for Accurate-targeting Poverty Reduction by Developing Targeted Industries during the 13th 5YP in Guangxi developed a catalogue of industries to be developed by each poverty county as well as their development objectives, which are closely aligned with the Guangxi Regional Agricultural Industry Development Plan.

¹⁷ The poverty elasticity of China's agricultural growth was -2.7 during the 1990s and about -1.5 in the 2000s. See Montalvo, J. G., and Ravallion, M. (2010). "The pattern of growth and poverty reduction in China." *Journal of Comparative Economics* 38; and Ravallion, M., and Chen, S. (2007). "China's (uneven) progress against poverty." *Journal of Development Economics* 82.

68. Through fostering the development of industries, Guangxi aims to upgrade the productive capacity of the poor areas. Since 2017 the designated poverty counties could use CPRF to support their CYFP activities. These counties have a relatively wide degree of flexibility to use CPRF into agriculture-related activities. The data from the technical assessment sample counties (Du'an, Tianlin and Teng counties) shows that in average counties used about 39 percent of their CPRF for CYFP-related activities. The majority of these funds have been used as direct subsidies or grants for registered poor households or designated poor village collectives, and micro-credit for registered poor households, mainly on condition that poor households and village collectives use these funds to engage in agricultural industrialization activities, either through farmer cooperatives or partnerships with enterprises.

69. Since 2010, the agricultural industrialization approach has been increasingly promoting the development of local specialty and “pillar industries” in poor areas, that is, agricultural products that market operators can easily associate with one or a few counties. In recent years, the government has started to develop farmer cooperatives in designated poor villages as a key entry point for the industrialization approach, often in partnership with agribusiness enterprises. The strategic rationale for the CYFP is thus to reduce poverty through helping the more remote areas participate in modern food value chains. Agribusiness enterprises have an important role in linking farmers to urban markets and building value chains that respond both to consumer needs and to the specific features of generally remote mountainous areas. Dynamic agribusinesses that are already close to consumers in high-end urban markets can also shorten value chains by sourcing produce directly from producers in poor areas. Their focus is on the creation of value through quality, safety of food products, and innovative marketing strategies.

70. The CYFP approach aims to develop local agriculture-based industries through the development of economic opportunities for rural poor households in partnership with various stakeholders in the value chain. The CYFP approach could benefit directly those income-poor people who have the necessary human capital and endowments of productive assets to enable them to escape poverty by participating in cooperative income-generation activities. For example, the Plan for Accurate-targeting Poverty Reduction by Developing Targeted Industries during the 13th 5YP in Guangxi identified 4.52 million registered poor as of 2015 out of which about 2 million (45 percent) are expected to have conditions which would allow them to participate in CYFP activities. The CYFP approach also requires that both relatively better-off and poorer rural households join their forces to achieve their economic goals. The current CPRF funding combines both the short-term income support measures (i.e. subsidies and grants to registered poor households and village collectives, and micro-loans) with longer-term approach for self-development through enhancing the institutional arrangements for the development of farmer cooperatives and productive partnerships between poor households/cooperatives and enterprises. The latter aspect of the CYFP seems to be currently under-funded in the CPRF budgets which allocate only about 2.6 percent of their funding (or about 7 percent of total CYFP budget) to cooperatives and enterprises support activities.

71. Technical Soundness. The CPRF for CYFP activities in targeted poverty designated counties takes the following key forms:

- i. *Support for agricultural production.* The program provides conditional subsidy payments to poor households based on cropping area (from RMB 500-2,500 per mu) or number of animals to encourage their participation in CYFP activities (11.2 percent of CPRF budget). Alternatively, funds could be used to provide poor households free production inputs. When combining this budget with forest farm and ecology payments, which provides similar per unit subsidies to registered poor household, but with the primary focus to encourage their engagement in tree crop production activities (i.e. plantation of fruit and nut trees, oil tea, bamboo, etc.) the total share of such household-targeted subsidy payments in the CPRF increased to 16.2 percent.

- ii. *Support for village collective economic organizations.* Since 2017 poor villages are eligible of receiving RMB 500,000 grant which they can use for agricultural industrialization development as a way to generate incomes for poor households (7.7 percent of CPRF budget).
- iii. *Micro-credit for registered households.* Until 2017 the prevailing practice was to on-lend the registered poor households microcredit loans provided by commercial banks to enterprises through “entrusted loan” arrangements. Enterprises then paid poor households “dividends” on these loans. In 2017, funds allocated to micro-credit loans (mainly interest rate subsidies) was 6.7 percent of total CYFP budget allocation. Starting from 2018 such loans are directly provided to registered poor households. However, given the commercial banks’ reluctance to lend to individual households, it is expected that the micro-credit lending volumes will decrease and only those households who are able to demonstrate their participation in agricultural industrialization activities, mainly through the support of cooperatives or enterprises may have access to these loans.
- iv. *Support for cooperatives.* The CPRF is used to provide financial support to farmer cooperatives that involve poverty farmer households, ranging from RMB 100,000 to 300,000 per cooperative. The cooperatives are expected to engage in the development of featured agriculture industries in their counties. The total allocation of the CPRF for cooperative development activities is small – about 2 percent of total.
- v. *Support for enterprises.* Some counties also used consolidated agriculture-related funds to support small and micro enterprises that participate in poverty reduction activities, or support enterprises that are involved in poverty reduction through establishing production demonstration bases. As a result the total direct support for poverty enterprises was only about 0.6 percent from the total CPRF budgets in 2017, albeit this does not include other forms of support these enterprises may be eligible, such as preferential taxes etc .

Support to Enterprises.

72. As explained above, leading enterprises have played an important role in the CYFP poverty reduction policy. Starting from 2000, eight different ministries and commissions are carrying out certification of national-level leading enterprises of agricultural industrialization. Monitoring and evaluation of these enterprises is done biannually, and those which no longer met the criteria are removed from the list. As of October 2016, the Ministry of Agriculture lists a total of 1,131 national-level leading enterprises. These enterprises have access to support policies, such as favorable loans; exemption from income taxes and other preferential policies.

73. Poverty reduction has not been the main selection criteria for agricultural leading enterprises. Instead, the certification criteria for such leading enterprises primarily focus on the scale and financial performance of the enterprises, as well as the leading role demonstrated to farmer households but without any requirements imposed on the performance of poverty reduction. Ideally, supporting agricultural leading enterprises would promote the development of industrialization in poverty area and have a so-called ‘trickle-down effect’ on poverty reduction mainly through the purchasing of raw material or employment generation, which involves both poor and non-poor households. Studies have generally found that such untargeted industrialization support policies have had a relatively limited impact on the poverty reduction¹⁸.

¹⁸ Wang Chunguang, Sun Zhaoxia, Zeng Yun, Exploration of new models of social development and poverty reduction and development, Social Sciences Literature Publishing House, 2014; Zhang Qi, CYFP model and the development of minority communities, Ethnic Minority Publishing House, 2013; Huang Chengwei, Zou Ying, Liu Jie, Accurate poverty reduction through industrialization: dilemmas of practices and furthering approaches – Yingjiang experiences of accurate poverty reduction through industrialization, Guizhou Social Science, 2017(09):125-131; Wu Hanze, Li Xiaoyun, Practice dilemma of CYFP in rural areas in the context of accurate poverty reduction – study on CYFP projects in Li Village of north China, Northwest Agriculture and Forestry Technology University Journal (social science edition), 2017, 17(1):9-16.]

74. Alternative to the general agricultural development enterprise support, the poverty reduction agencies have certified specific poverty reduction dragonhead enterprises. Starting in 2004, the Poverty Leading Group of the State Council promulgated thought a Circular on Qualifying National Level Dragonhead Enterprises a certification process for poverty reduction leading enterprises nationwide. Comparing with the certification criteria of national-level agricultural leading enterprises, the certification of national-level poverty reduction leading enterprises does not focus on the scale of enterprises, but on their role of lifting households out of poverty. In 2007, Poverty Reduction Office of the State Council carried out certification of the second batch of national-level poverty reduction leading enterprises. With two batches of qualifying and certifying, Poverty Reduction Office of the State Council has in total certified 625 national-level poverty reduction leading enterprises.

75. On the other hand, enterprises that have direct linkages with poverty reduction are certified by poverty reduction agencies as *poverty reduction leading enterprises (PRLEs)*, which allows for better targeting of government support programs for poor households. In 2004, the Poverty Reduction Office of the State Council (PROSC) promulgated the Circular on Qualifying National Level Leading Enterprises, and then launched certification process for PRLEs nationwide. Comparing with the certification criterions of national-level agricultural leading enterprises, the certification of national-level poverty reduction leading enterprises does not focus on the scale of enterprises, but on their role of lifting households out of poverty. In 2007, PROSC carried out certification of the second batch of national-level PRLEs. With these two batches the PROSC has certified 625 in total national-level PRLEs. However, since then, the PROSC has no longer certified national level PRLEs.

76. Guangxi has certified two batches of 165 regional-level and 119 municipal PRLEs in 2010 and 2013 respectively. With the 22 national-level PRLEs previously certified in two batches and considering 44 overlapped in national, regional or municipal level, there are 262 PRLEs in total. However, the last available data to construct the profile of these enterprises is from 2010 and includes 109 national and regional level PRLEs (Table 6) According to this data, PRLEs seem to have had a considerable poverty reduction contribution – in average, poor households made up about 37 percent of total contracted households, which is significantly higher than rural poverty incidence rate in Guangxi. These results confirm that more focused conditional support to enterprises improves the poverty targeting of such programs.

Table 6: Profile of Regional and National Level Poverty Reduction Leading Enterprises: 2010

Indicator	Max	Min	Mean
Total assets (million)	3,377	10	212
Fixed assets (million)	2,370	3	97
Annual revenue (million)	2,199	7	204
Number of farmer household contracted (household)	93,093	437	12,037
Number poor farmer households contracted (household)	65,127	152	4,494
Number of poor villages covered	1,587	4	61
Employment provided (person)	20,000	16	1,736

Data source: World Bank team calculations based of the data provided by Guangxi Poverty Reduction Office

77. Among the 262 leading enterprises at regional level and above in 2016, 22 are located in the targeted 28 PforR counties. Comparing the 22 enterprises in the targeted poverty counties with all enterprises, the ratio of raw material purchase from the contracted bases is lower in targeted poverty counties: 40.3 percent compared to the regional average of 68.3 percent, which may reflect less opportunities for the development economically and financially viable agriculture-based industries. The reported amount of income growth of participating farmer households is also lower in targeted poverty counties than the regional average

(Table 7). The above information suggests that while CYFP enterprise led activities have potential for poverty reduction, the government support programs to such PRLEs should incentivize them to increase agriculture product purchases directly from households and farmer cooperatives, relative to their own production bases.

Table 7: Selected Indicators of Agricultural Leading Enterprises in Targeted Poverty Counties and at the Regional Level: 2016

Indicator	Guangxi Average	Average of Enterprises in the targeted 28 counties
1. Purchase value of major agricultural product raw materials		
1.1 Proportion of purchase for enterprise own production bases	9.4%	29.1%
1.2 Proportion of purchase from farm household contracted production base	68.3%	40.3%
1.3 Other methods	22.3%	30.6%
2. Average number of farmer households led by enterprise in Guangxi	12,821	12,713
3. Income growth of farmer households in the production bases (CNY/household)	2,686	1,769

Data source: constructed according to data provided by the Department of Agriculture of Guangxi

78. The PRLE certification has stopped in in 2007 and the support of the by then certified enterprises stopped in 2015 due to funding and legal issues. However, due the widely recognized strategic importance of such enterprises on poverty reduction and due to the need for a more poverty targeted enterprise support program a new PRLE program was recently initiated. In January 2018, the PROSC promulgated the Circular on Improving the Certification and Management System of Poverty Reduction Dragonhead Enterprises (PDHEs) (Document No. 62), and launched once again certification of poverty reduction leading enterprises. Enterprises are expected to fulfill poverty reduction responsibilities by leading poor farmers to income growth and poverty reduction through developing industries, including employing poor laborers for stable jobs, renting land from poor farmers, or establishing contractual relationships for raw material supply with poor household or their farmer cooperatives. More importantly, PRLEs are expected to reach specific targets for number of participating poor population, benefits distribution either to poor village collectives or poor farmer households as a measure for improved poverty targeting of these programs. In return, these enterprises are eligible to receive supportive policies to develop agricultural industries, such as favorable loan terms, grants and subsidies, preferential tax policies, etc.

79. The new PRLE certification process laid out in the Document No. 62 provides an opportunity to improve the poverty impact and targeting, as well as overall efficiency of the CYFP-based enterprise support programs by addressing the shortcomings with the current enterprise support programs. This is particularly relevant as such support to PRLEs will be incorporated in expenditure scope of the consolidated agriculture-related funds starting from 2018. The Guangxi Poverty Reduction Office would need to prepare detailed implementation guidelines in accordance with the general provisions of Document No 62, which would provide guidance for the new round of enterprise certifications at all levels. The technical assessment recommends that such guidelines would be specific enough to give this new PRLE program an explicit poverty alleviation focus with a measurable impact and a focus on enterprises working with poor farmers and/or cooperatives, providing market linkage and value additions, agreement on deliverables (e.g. through a target defined outcome/results matrix), etc. The guidelines should specify the PRLE accreditation process which would be subject to a monitored commitment in terms of investments, purchased products from targeted areas/villages, number of poverty households linked and benefits provided and shared with the poverty households. There is also a need to establish enterprise database and M&E system in order to track

and monitor their impact on the poverty alleviation. It is therefore suggested that development of such guidelines and the related PRLE database be the focus of the institutional improvement activities for this PforR.

80. It is expected that the approval of the detailed PRLE program certification guidelines and related M&E activities, would attract more suitable enterprises which are committed to working with poor farmers and farmer cooperatives in poverty areas. Specifically, the improved PRLE program implementation is expected to lead to increased enterprise purchases of agricultural raw materials, semi-processed or final products from farmers and farmer cooperatives as the link between farm and end-consumer. Combination of pro-poor accreditation of enterprises and more clear poverty focus given to pro-poor farm households or their cooperatives could provide sufficient confidence that a reasonable share of purchase would come from poor farmers.

Cooperatives.

81. Farmer cooperatives play an important role in the agricultural industrialization and for poverty alleviation. They are critical to help organize producers, assist farmers to respond to consumer demand and apply standardized production methods. Such cooperatives can capture part or all benefits from value chains, can become valuable partners for enterprises. They serve as nodes and entry points for technology extension and agricultural services, and serve as stewards for food and products quality. The Government enacted the China Farmers' Professional Cooperative Law (FPCL) in 2007, which led to rapid growth in the number of farmer cooperatives.

82. The recent World Bank study on farmers cooperatives in China found that cooperative members have generally positive perceptions about the impact of cooperatives on their production activities¹⁹. While farmers' cooperatives have provided various ranges of services, the members noticed most significant impacts with regards to service provision for improving quality of products and in extending new technologies and varieties. This suggests that cooperatives have played a useful role in enabling farmers to engage with the rapidly changing market for agricultural products, improving production efficiency, extending new technologies, and standardizing agricultural production. The study findings also suggest that cooperatives have been effective in bridging the gap between farmers and markets. They indicate that cooperatives have played a useful role in enabling small farmers to engage with the rapidly changing market for agricultural products. Since 2015, farmer cooperatives can also become full economic entities which would allow them to access credit from commercial banks.

83. In 2013, the Ministry of Agriculture started to carry out a detailed assessments of national-level farmers' demonstration cooperatives. It is required that demonstration cooperatives establish standardized financial management systems (such as staffing with qualified accountants and presentation of standardized accounting statements). In the same year, Guangxi also started to assess and monitor regional-level demonstration cooperatives. The assessment follows the same criterion as for the national-level demonstration cooperatives.

84. A total of 14,445 farmer cooperatives are registered in the 28 targeted counties, of which 569 have the status of regional and 40 have the status of national demonstration cooperatives. However, majority of the cooperatives do not currently meet the standards as established in the Cooperative Law, nor are they able meet requirements for poverty reduction, such as having a minimum of 30 percent of the members coming from registered poverty households or having at least 40 percent of all registered poverty

¹⁹ The World Bank (2016). "Enhancing the Role of Farmer Cooperatives in Inclusive Agricultural Growth in China." Washington, DC. World Bank.

households in the administrative village or villages as members (the inclusion of poverty households is currently not a formal requirement for cooperatives)²⁰. Many cooperatives also are not actively involved in business activities, albeit there is no data about the precise share of such cooperatives. The technical assessment estimate is that out of the potential pool of 14,445 established cooperatives in the targeted 28 counties, some 2,000 cooperatives have probably reached the level which would make them suitable for poverty reduction support programs.

85. Low management capacity, weakness in organizational and financial management, limited business experience and business attitude, and general non-compliance with the provisions of the Cooperative Law are the most common shortcomings in Guangxi's farmer cooperatives, as in other provinces of China. In those cooperatives, which are business oriented and profitable, a small number of individuals who have made largest investments usually control the cooperative operations and their assets. Such cooperatives mostly lack reasonable controls and financial transparency as required by the law. This makes such cooperative unattractive for poor farmers and unsuitable for poverty alleviation.

86. The World Bank implements a range of investment projects, which support farmer cooperatives. These projects have provided considerable insights about opportunities of farmer cooperatives for poverty alleviation²¹. The lessons suggest that benefits from farmer professional cooperatives for poverty alleviation can be significant but they depend on enforcement of clear operational standards including clarity and validation of shares, clearly defined benefit distribution agreements, transparent accounts and accounts management, open governance and shared decision making, and a clear poverty alleviation commitment in terms of inclusiveness of poor households as members and a fair and transparent sharing of benefits.

87. Technical assessment recommends that the proposed PforR support the Guangxi government on-going efforts to strengthening the role and capacity of cooperatives by developing existing and new cooperatives into Pro-poor Farmer Professional Cooperatives, which meet the standards and conditions needed to achieve the poverty impact and targeting. This would allow using them as centers of excellence and demonstration models for poverty reduction. The PforR would also help the government to establish the appropriate M&E arrangements to track the poverty reduction impacts of its support programs.

88. Institutional arrangements. The implementation of the CYFP programs is led by the Poverty Reduction and Development Leading Groups, which are established in governments at all levels. These Leading Groups are chaired by the Party leaders, with members from departments related to poverty reduction. Its major function is to coordinate the activities of the relevant departments and develop poverty reduction policies. Under the Leading Group is Poverty Reduction Office, which is responsible for specific poverty reduction related works.

²⁰ The current poverty reduction requirements for cooperatives eligible for financial support vary widely among counties. For example, in Tengxian county, the conditions for farmer cooperatives to qualify for CPRF support (less than RMB 200,000 each) are that the cooperative should support at least 5 poor farmer households per year (this reflects relatively low poverty incidence, although the county has large poverty population); carry out training and technical guidance at least 3 times per year; and the incremental income of poor farmer households should be over RMB 1,000. In Du'an county, the conditions for applying for the financial support (RMB 100,000-300,000 per cooperative) are that the percentage of poverty households among the members of the cooperatives must be over 20%, and cooperative activities should provide at least 20 poor households an annual incremental income over RMB 1,000.

²¹ China - Poverty Alleviation and Agriculture Development Demonstration in Poor Areas Project (Guizhou, Sichuan and Gansu provinces); China - Guizhou Rural Development Project; China - Guangxi Rural Poverty Alleviation Pilot Project, and the China - Shaanxi Poor Rural Areas Community Development Project.

89. There are seven special assignment working groups under Guangxi Autonomous Region Poverty Reduction Leading Group. CYFP Special Assignment Working Group (CYFPSAWG) is one of the seven working groups, which includes 21 regional level government agency members. Department of Agriculture of the Region has been appointed as the lead agency for the working group. Main function of CYFPSAWG is policy design on CYFP, organize preparation of the regional level 13th five-year planning on CYFP and guide the preparation of corresponding county level 13th five-year planning.

90. Each county has its own CYFPSAWG under the Poverty Reduction Leading Group. County agriculture bureau works as the lead agency for the working group. The assignments on poverty monitoring and performance evaluation of the poverty reduction funds are the responsibilities of the Comprehensive Coordination Special Assignment Working Group and Funds and Policy Special Assignment Working Group respectively.

ii. Skills training

91. *Introduction.* Skills training for poor rural households has been an important avenue for escaping poverty in China. Recently the skills training programs in Guangxi had shifted from providing training for off-farm employment to providing skills for improved farming productivity and income as most surplus farmers had migrated to outside employment already. There a wide range of skills training programs for rural households in Guangxi, with the regional Poverty Reduction Office (PRO), Departments of Agriculture (DOA), Human Resources & Social Security (HRSS) and Education being the main training providers. Of these, the Rain and Dew Program managed by the PRO and the New Professional Farmers Development Program managed by the DOA which geared more toward households included in the NRPS, had been included in the program. The PRO's Rain and Dew Program recently has shifted to subsidize college students from poor household in the poverty registry and less on providing skills training programs. Meanwhile, the Education Department has provided systematic student-aid for students from registered poor households from pre-school to university level education. It also manages few short-term training programs for rural farmers through its earmarked sectoral funds. Similarly, the HRSS has provided short-term skill training programs for rural farmers for off-farm employment through its earmarked budget funds. After discussions with the related agencies at regional and county levels, the technical assessment suggests that the PforR focus on the New Professional Farmers Development Program, which is most relevant to the achievement of the PforR objectives.

92. *Strategic Relevance.* The 13th 5YP poverty reduction plan states that skills training of rural population is one of the priority activities for reducing poverty. In the *Speeding Up the New Professional Farmers Development Program* and the *Implementation Plan for the New Professional Farmer Development Program* (2015 and 2017 respectively) by Guangxi regional government, the New Professional Farmers Development Program had been identified as one of key programs for poverty reduction and a set of regulations had been established. It was also included in the CPRF, albeit its funding levels have been very low, reflecting the relative novice of this program. Therefore, the allocation of consolidated funds to the program reflects the Guangxi regional government's commitment to lifting the poor and disadvantaged population out of poverty through skills development.

93. The Chinese Central Government's No.1 Document launched on February 4, 2018 on the *Implementation of the Strategy of Rural Revitalization* called for an accelerated effort to invest in new professional farmers as a critical step to boosting agricultural development, rural revitalization and ending extreme poverty. The document highlighted that building capacity of knowledgeable and skilled farmers is the fundamental force for improving agricultural productivity and innovation, and improving the quality of rural employment. The document proposed several measures to improve the New Professional Farmers Development Program, such as supporting farmers to engage in secondary or tertiary vocational education

activities on part-time basis, and encouraging farmers' cooperatives and leading enterprises to provide training to its associated farm households.

94. *Technical Soundness.* The *New Professional Farmers Development Program* was initiated by the Ministry of Agriculture (MOA) in 2014 with the objective of making farming a more attractive profession in China as a basis for local economic development in rural areas. The program had evolved from the previous Sunshine Program, but shifting from training rural farmers for off-farm employment to increasing farming income at their home locations. The program has solid design, which consists of three phases of 15-days training, accreditation of the professional farmer certificate, and continuous technical follow-up support. It has been implemented by the DOAs and Agricultural Broadcasting and TV Schools at regional and county levels, based on an integrated nationwide management information system, including databases of trainees, trainers and teaching materials, as well as a cloud platform for information sharing. In Guangxi the program has been implemented at county levels with the overall guidance and management from the DOA since 2014. The program was scaled up from 22 counties in 2014 to 88 counties in 2017. So far, there are 381 field schools set up at villages for continuous technical support. The total number of farmers in Guangxi who completed the training program increased from 13,266 in 2014 to 17,070 per year in 2016, out of which some 53 percent were granted with professional farmer's certificate since start of the program. In the targeted 28 counties there were 4,291 farmers participating annually in this training program in 2017. These numbers are still rather low and indicate a significant scope for scaling up in order to deepen the impact of this program. Most of these trainees have been involved in the establishment and running of farmers cooperatives. As such, the New Professional Farmers Development Program could contribute directly to agricultural industrialization as the farmer trainees could potentially become the leading force behind the development of farmer cooperatives.

95. Guangxi has taken a number of institutional enhancement steps to improve the effectiveness of the New Professional Farmers Development Program and to make it more pro-poor in the past years including: (i) formulating more detailed guidelines for the program implementation, including fund allocation and M&E system; (ii) promoting more market-driven and needs-based training activities which are more closely aligned with local Chanye Fupin development efforts; (iii) explicitly engaging poor households from the NRPS by setting 10 percent target for trainees from registered poor households; and (iv) giving counties more flexibilities on selecting training institutes. Guangxi has committed to significantly scale up the program over the PforR period under their CPRF budgets, with the aim to increase almost ten times the number of farmers completing this skills training program by 2020, out of which at least 18 percent would come from registered poor households.

96. The technical assessment determined that the New Professional Farmers Development Program has solid design, functions well at county level, is aligned with agricultural industrialization activities, and has started to have a more explicit poverty focus. There is an anecdotal evidence that trainees who have participated in the program have contributed to local agricultural development and poverty reduction, although more formal evaluations are still lacking. The main shortcoming of the program so far is: (i) relatively small coverage of farmers, largely due to its novelty; and (ii) lack of explicit poverty or gender targeting, until recently. The proposed PforR aims to incentivize counties to allocate more of the CPRF budget for the New Professional Farmers Development Program, increasing thus the number of farmers participating, and getting accredited. It would also encourage the counties to increase the share of registered poor and woman in these skill training activities. In order to further improve the effectiveness of the program, the technical assessment makes the following recommendations, which are aligned with the Program's Guideline and the No.1 Document: (i) continue to build capacity for the training institutes including training of teachers and instructors on curriculum development and teaching methods, equip the institutes with necessary training equipment and facilities, especially for field schools and/or hands-on training bases; and (ii) organize knowledge-sharing activities at regional level to promote better program implementation at all counties.

97. Farmers in Guangxi are vulnerable to the climate change related extreme events, such as heavy rains and floods and to a lesser extent longer dry spells on a seasonal basis, as well as climate variability. The technical assessment has determined that there is a need to broaden the current New Professional Farmer Development Program training curricula to include technical training on enhancing climate resilience of agricultural activities, especially in the area Climate Smart Agriculture techniques and practices.

98. Since 2017, Guangxi has carried out the training activities of women farmers. With poor women accounting 40 percent in 28 targeted counties, there is an opportunity for this PforR to reduce the gender gap in access to the New Professional Farmer Development Program. Currently, the share of female participants in this skills training program is only 25 percent. The key reason is a relatively distant location of training centers which is a significant constraint for rural women participation, who are often care givers for children and elders. The following two activities are proposed under the PforR to enhance women's participation in the New Professional Farmers Development Program: (i) organize training programs specifically targeting at rural women together with China Women Union for reaching out to more rural women; and (ii) provide follow-up technical support to rural women who have already completed skills training programs to ensure their continued learning. It is expected that the share of female participation in the skills training activities would increase to 30 percent by 2020 as a result of the PforR support.

99. Institutional arrangements. The Guangxi DOA manages the New Professional Farmers Development Program at the regional level. The Agricultural Broadcasting and TV Schools under DOA and their county level Bureaus are responsible for the activity implementation, including skills training, accreditation, and continuous follow-up support. The county agriculture bureaus have been responsible for program management, and M&Es. The technical assessment confirms that these institutional arrangements are well functioning and well placed to continue to deliver the program objectives.

Results Area 2. Improved Infrastructure for Rural Poor

100. This results area supports the delivery of basic rural infrastructure for the designated poor villages in the targeted poverty counties under the CPRP funding arrangements. The goal is to ensure that the registered poor households have access to adequate rural drinking water supply and rural roads, which are required to meet Guangxi eight plus one “haves”, multi-dimensional poverty eradication criteria²². The PforR would support the upgrading of the roads to natural villages and rehabilitation of the related infrastructure (i.e. small bridges, road safety facilities, etc.) and upgrading and/or renovation of village-level drinking water supply infrastructure. Given the high levels of the infrastructure spending through CPRF the PforR would support improved project selection and preparation process to enhance the efficiency of infrastructure investment projects for sustained poverty reduction results.

i. Drinking Water Supply

101. Introduction. The 13th Five Year Plan for Poverty Alleviation of Guangxi supports investments that aim to ensure rural poor adequate accesses to basic infrastructure services. The goal of such a Plan is to provide the target villages with adequate water resources infrastructures, including construction or renovation of irrigation schemes, on-farm works, flood risk management facilities, and water supply systems for safe drinking water. Although all these activities were listed in the 13th 5YP for Poverty Alleviation of Guangxi, only the safe drinking water supply is one of Guangxi's eight plus one multi-dimensional poverty eradication criteria needed to graduate households from poverty.

²² Almost all poor households and villages had access to electricity in Guangxi by the end of 2014 and telecommunication and internet infrastructure is being operated by the designated entities. As such, this PforR does not focus on the delivery of these infrastructure assets. For definition of the 8 plus one “haves”, see paragraph 45.

102. Strategic relevance. Since 2005, Chinese Government has implemented rural safe drinking water supply program and provided safe drinking water to 520 million rural residents. By the end of 2016, 84 percent of rural population has had access to piped water supply and 79 percent to tap water. The coverage of safe drinking water in 54 poverty counties is lower than the regional average, with access to piped water 82.3 percent among rural population, according to NBS (2016), *Poverty Monitoring Report of Rural China 2016*. Access to safe drinking water is lower in Karst mountainous areas where the water is difficult to store.

103. Guangxi recognizes, in its 13th 5YP for Poverty Alleviation that the provision of safe drinking water infrastructure is one of the key pillars in poverty reduction. Although the 13th 5YP for Poverty Alleviation includes a wide range of investments for the water resources management in Guangxi, only drinking water supply has been included in the PforR boundary as the funds for other water sector activities are allocated through the earmarked sectoral funds and are thus not part of the consolidated poverty reduction funding arrangements. Access to safe drinking water will benefit the health conditions of rural poor and saves their time in taking water from distance for other productive activities.

104. In accordance with the 13th 5YP for Improving Rural Safe Drinking Water Supply of Guangxi Region prepared in April 2016, Guangxi Regional Government plans to invest RMB 4.87 billion (RMB 3.90 billion from the central government and the rest RMB 970.0 million from the region and counties) to: (i) build 17,660 new drinking water supply schemes that would benefit 2.92 some million rural poor; (ii) extend 855 existing distribution networks to supply drinking water to 821,800 rural people; and (iii) renovate and/or upgrade existing drinking water supply schemes that will benefit about 1.88 million rural people. The 13th 5YP also focuses on supplying drinking water to 37.7 million rural population with piped water, covering 85.7 percent of the total rural population in the region, among which 35.4 million rural population will have household connection, covering 80.5 percent of rural population, by the end of 2020.

105. Poor population in mountain areas are already facing drinking water scarcity, at least during part of the year, and climate variability is likely to exacerbate this. This Results Area would enable targeted poor household to adapt to the increasing climate risk through expanding availability and safety of drinking water in response to potential water scarcity resulting from climate variability as well as encouraging water conservation through improved technical standards for water supply systems.

106. Technical soundness. The CPRFs allocated on water sector will mainly support the renovation and upgrade of rural safe drinking water supply schemes at village level. Depending on the priorities determined by the county governments, the funds could be used to support the following specific activities: (i) construction of new drinking water supply schemes; (ii) expansion of existing drinking water distribution networks; and (iii) renovation and/or upgrade of existing rural drinking water supply schemes. These activities will help to improve rural poor living standards, as well as the public health outcomes from reduced incidence of water-borne diseases.

107. The technical assessment confirmed that the proposed investments and activities for the rural drinking water supply under 13th 5YP for Poverty Alleviation are generally technically sound and the stated targets are achievable. The rural water supply activities covered under the PforR will mainly take the water from existing reservoirs, springs and wells. Although the technology and engineering measures deployed under the drinking water supply program are conventional and mature (i.e. no major technical difficulties are foreseen), the introduction of some best practices, such as better technical guidelines and training of the county technicians, under this PforR operation could help to improve the design quality, as well as the operation and maintenance of the structures, to ensure sustainability of the rural safe drinking water supply systems. Recognizing the lower capacity at the county level design firms, the Regional Water Department had recently revised and issued a Technical Guidelines on Engineering Design for Rural Water Supply and planned to organize the trainings to help the county technicians to improve the design of the rural water

supply facilities. To make such a guideline practical, the technical assessment recommends that these improvements include the following actions taken by the Regional Water Department: (i) preparing a short Technical Primer on Engineering Design for Rural Water Supply, which focuses on the key elements of rural water supply facilities with practical solutions; and (ii) organizing the trainings on design, operation and maintenance of rural water supply facilities.

108. The drinking water supply activities under the CPRFs would target specifically rural drinking water supply systems to registered poor households. This does not mean that all registered households would be connected to piped water, including tap water, as there may be technical difficulties to connect some households or lack of willingness of households to connect (e.g. some households may choose to use hand pumps rather than connecting to the tap water). The access to drinking water is defined as piped water supply connected to households and village water stands, where the “piped drinking water systems” are defined as the water supply scheme with the single source of water, basic disinfection, distribution pipes to water stands in communes with over 20 households (distance less than 800 m from households) and/or to household connection (tap water supply system). To reflect the achievement of drinking water supply targets under the PforR, “number of registered rural poor with new piped drinking water connection” has been selected as an appropriate indicator (DLI). Due to the variety of the different conditions of rural drinking water supply in the targeted counties, the actual water supply systems would be designed to fit all these different conditions.

109. The water quality is expected to meet the applicable national drinking water standards. To ensure the water quality, the raw water quality is tested to make sure the source water will meet the standards for drinking water prior to the design. Whence the water supply schemes have been built, the water test after the treatment will be tested as one of the mandatory steps for final inspection and acceptance of the scheme. All these tests will be carried out by either the water quality monitoring stations under water bureaus of the counties or the county center for disease control that are the arms of the Regional Center for Disease Control (RCDC). During the operation, the RCDC and/or its arms at the county level carries out tests of sampled rural drinking water systems twice a year to monitor water quality to ensure the safety of water supply in the rural villages. The water quality monitoring report will be prepared by the RCDC and distributed to relevant authority to take necessary actions in case of necessary. Previous reports show that the water quality of rural water supply in Guangxi is at an acceptable level, supported also by the evidence that water related diseases have declined significantly.

110. Institutional arrangements. The governments at county levels are responsible for the preparation and implementation of their rural water supply activities under the PforR. The Rural Water Division of Guangxi Department of Water Resources will provide guidance and oversee the implementation of these activities. The same division is also responsible for providing technical support and monitoring the progress of the water supply activities according to annual plans prepared at the beginning of the fiscal years. At the county level, the construction and management division under the County Water Bureau will be responsible for the design and implementation of all drinking water supply activities, such as renovation and upgrading of rural water supply systems. After the completion of these activities, Rural Drinking Water Management Units under the county Water Bureaus or user’s associations will take over and are responsible for operation and maintenance of these rural water supply systems. The technical assessment confirms that such institutional arrangements are reasonable, but recommends that additional technical support from the regional government be provided to ensure the quality of the design, construction and operation of these infrastructure assets. As a part of their routine monitoring activities of rural water supply systems, the county Center for Disease Control (the CDC) will carry out tests on an annual basis to monitor the water quality to ensure the safety of water supply in villages.

ii. Rural Roads

111. Introduction. Improving rural connectivity remains crucial to rural socio-economic development in China. Good road networks enable growth in local economic activities and provide ready access to public services. China's investment strategy of road construction during the past decade has contributed to economic growth and poverty reduction. As such, access to rural roads has been established as one of the eight plus one multi-dimensional poverty eradication criteria in Guangxi, which needed to graduate households from poverty. According to Guangxi poverty statistics, among the 28 poverty-stricken villages, some still have lack of roads as a serious poverty gap. In Du'an and in Dahua counties, nearly 20 percent of households identify lack of appropriate transport infrastructure as the main cause of poverty. In Donglan, Huanjiang and Bama counties, almost 10 percent of families report so.

112. Strategic Relevance. To help achieve the national goal for eradication of absolute poverty by 2020, the Ministry of Transport issued the National 13th Five-Year Plan of Poverty Reduction Plan through Transport in July 2016, which identified the million km rural road program as the key activity including: (i) Rehabilitation of 10,000km of township roads and 230,000 km of administrative village roads; (ii) Paving 250,000 km of roads for large natural villages with more than 20 households; (iii) Construction/rehabilitation of 50,000 km of production roads facilitating tourism and productivity development; (iv) Rehabilitation of 15,000 damaged bridges; and (v) Maintenance of about 430,000km of rural roads.

113. In line with the National 13th 5YP, Guangxi 13th 5YP of Poverty Alleviation also calls for the efforts to further improve the rural road network, transport services and maintenance system. The 13th 5YP aims to achieve 100 percent road connectivity for all the natural villages in the 54 poverty counties in Guangxi by the end of 2020. Specifically, it lays out the following rural transport activities: (i) paving the remaining 249 administrative village roads (as documented in 2015) by 2020; (ii) widening of 1,150 km of rural roads; (iii) rehabilitation of 940 linear meters of damaged bridges; (iv) elimination of the potential rural road safety issues for 2,070 km; (v) construction of 1,230 km of productive roads (mostly for agriculture); and (vi) construction of passenger stations. In addition, the 13th 5YP sets a target of 100% road connectivity rate for all large natural villages (≥ 20 households), meaning all such natural villages are expected to have a cement or gravel road by 2020.

114. According to the data provided by Infrastructure Group under the RPRO, the road connectivity rate of natural villages in 28 targeted counties was 95 percent as of March 2018. The road investments are already well funded, reaching 25 percent in the CPRF budgets for 28 targeted counties in 2017. As such, the technical assessment determined that the government does not need extra incentives from the proposed PforR to meet its targets for rural roads. However, the technical assessment confirmed that there are some areas which require improvement of the qualitative aspects of rural roads improvements, which will be addressed through the PAP action. These issues are discussed further below. In addition, the importance of rural roads investments in the CPRF arrangements is recognized through the additional RF performance indicators.

115. Technical soundness. According to the data provided by Guangxi, all administrative village roads in the targeted 28 counties have been paved as of 2017. As such, rural transport activities supported by the CPRF focus primarily on the following activities: (i) rehabilitation and/or upgrading of natural village roads, including roads for facilitating tourism and other economic activities (\leq Class IV); (ii) rehabilitation of damaged bridges; and (iii) embedding road safety facilities for village roads. According to the environmental safeguard screening, the proposed PforR would exclude: (i) rural road activities with technical class higher than IV; and (ii) new-construction/rehabilitation of rural infrastructure activities with significant social/environmental impacts.

116. The rural transport activities are assessed as suitable to support the achievement of the PforR's objectives of poverty alleviation in the 28 targeted counties. However, the technical assessment has identified the following areas for further enhancement of the effectiveness of the rural transport programs: (i) enhancing quality control and technical standard compliance for rural transport projects; (ii) improving planning of rural infrastructure projects including roads, bridges and safety facilities, by prioritizing local infrastructure demands; (iii) strengthening technical capacity of local staff especially in townships; and (iv) factoring climate resilience in the design of the rural roads. These issues are discussed below in further detail.

117. *Planning.* Although the 13th 5YP indicates that road pavement works only cover natural village with more than 20 households, many counties aim to central and regional level fiscal transfers to leverage more investments in rural roads infrastructure. As a result, the rural road project coverage has been extended, or is planned to be extended, also to smaller natural villages, which have fewer than 20 households. This raises the issue of cost-efficiency. For example, the technical assessment determined that there is a need to consider trade-off between extending roads to small natural villages and rehabilitation of damaged bridges, road safety facilities, and maintenance for sustainability. The technical assessment recommends that counties enhance internal coordination and planning of their infrastructure assets through integration and prioritization various infrastructure demands, and issue more customized fiscal subsidy standards based on local conditions.

118. *Acceptance and quality control.* In most counties visited by technical assessment team, the rural roads are not subjected to strict quality control measures. The usual approach is for the leading agency to organize several other related agencies' staff to attend the acceptance checks, which include cross-check of road completion works as per technical standards, and then issue acceptance report and disburse. Only few counties are hiring third-party agencies to conduct on-site quality tests before acceptance (i.e. Du'An). The technical assessment recommends that this practice be adopted also by other targeted counties when feasible, given the associated financial cost which has implications on the CPRF budget allocations.

119. *Technical Standards.* Through years of practices, transport bureaus have developed comprehensive technical standards for rural road engineering design, implementation, supervision and acceptance. To further regulate the implementation of the rural roads investments, Guangxi has provisioned *the Implementation Guidelines for 13th Five-Year Rural Transport Infrastructure No. 652* in November 2017. However, these standards/guidelines are only applicable to classified roads, and associated safety facilities and bridges. Under the proposed PforR, the roads to be rehabilitated are unclassified village roads including natural village roads and productive roads. These road activities are subject to the technical standard called *the Notice on Accelerating the Implementation of Four Categories of Poverty Reduction Projects including Natural Village Road Activities No. 62 (Notice No.62)*, which was issued in June 2016 by regional government. Overall, these technical standards listed minimum requirements for gravel and cement road constructions, given the substantial scale of activities with strict timeline to achieve this poverty reduction target.

120. However, there are still concerns about the compliance with the standards by the local agencies. According to the regional regulations, the local authorities are allowed to lower certain standard requirements based on their local conditions to ensure cost-efficiency. Furthermore, the local completion acceptance only focuses on the mandatory parameters, such as road width, length, pavement thickness, while less attention may be given to equally important (but less restrictive) parameters, such as strength, material properties, drainage and safety facilities. The technical assessment therefore proposed a PAP to upgrade the Notice No.62, with the new issued Technical Code for Village Road Engineering (GB/T 51224-2017) by Ministry of Housing and Urban-Rural Development as reference. The PAP will further regulate the design, implementation and acceptance compliance, and promote the quality improvement, climate resilience and maintenance consideration for sustainability. In addition, the technical assessment

recommends that the regional and county authorities strengthen the capacity of the staff of the relevant county and township level agencies responsible for the management and implementation of the rural roads activities to follow and meet technical standards stipulated in the updated Notice No. 62.

121. *Climate Resilience.* Most of the 28 Guangxi PforR counties are located in the mountainous or hilly areas, which occupies 76.6 percent of the whole province's terrain. The average annual rainfall is 1,500-2,000 mm. These factors could result in floods and landslides, especially during heavy rains in summer. According to the technical assessment, it was estimated that the average county in Guangxi would need to spend about RMB 10–30 million per year for repairs of rural roads due to natural disasters. The local authorities are adopting some approaches such as paving roads rather than constructing gravel roads for rural roads segments with higher risk for weather related damages. The technical assessment also recommends that regarding these vulnerable segments, a more specific technical consideration for drainage systems or slope protection should be adopted. To mitigate the climate related risks, low-cost measures such as improvement of road quality control especially with regards to strength, and emphasis on appropriate drainage system would also be included in the updates of the Notice No. 62 as the PAP.

122. *Institutional arrangements.* The line agencies which have a key role in the rural transport activities during 13th 5YP period are Department of Transport (DOT) and Poverty Reduction Office (PRO). These line agencies cover different technical and administrative class of roads. The DOT oversees the roads with administrative class higher than administrative village road, or technical class \geq IV. The PRO, on the other hand, is overseeing the implementation of unclassified road activities, which include natural village roads and some productive roads. Given the relative technical simplicity of the natural village road activities, technical assessment concluded that PROs at different levels (regional, municipal and county) have sufficient technical capability to deliver their rural infrastructure activities.

123. To facilitate the smooth delivery of the government program, the regional government has established the Infrastructure Group under the Poverty Reduction Program Leading Group at regional, municipal and poverty county levels, which has seconded staff from PRO, transport, water, and construction bureaus. The Infrastructure Group is tasked with providing strategic guidance and tracking physical implementation status of infrastructure projects. While at the county level PROs are playing the prominent role in the implementation of natural village road activities, there are also other involved agencies which may be involved in rural roads activities (e.g. Finance Bureau, DRC, Construction Bureau, Agriculture Bureau, and Ethnic and Religious Bureau²³). But in most cases, above agencies tend to entrust township governments to implement these small contracts because of better coordination with villagers, while they only organize acceptance and channel funds.

iii. Infrastructure Project Preparation

124. *Introduction.* Infrastructure projects are one of the most attributable factors in achieving Guangxi's 13th 5YP for Poverty Alleviation. Two out of the nine indicators for villages being qualified as being lifted out poverty, are related to infrastructure—access to water and roads. In addition, poverty counties also are making investment in sanitation and community public facilities in poverty villages including community hall, plaza, clinic, library, etc. Under the CPRF scheme, the total fund available for rural infrastructure investment has significantly increased, and eased the financing constraint of poverty reduction program. Nevertheless, given the tight implementation time of the government program, proactively selecting and preparing infrastructure projects is of great importance for achieving the poverty reduction goals as required by the central government. In addition, maximizing the poverty reduction impact of the program requires to ensure good quality of these investment projects.

²³ The Ethnic and Religious Bureau is in charge of small-size roads inside the minority natural villages.

125. Strategic relevance. The activities supported under this PforR are to strengthen Guangxi infrastructure project management capacity with an aim to improve the efficiency and effectiveness of CPRP expenditures, and thus the poverty reduction impact. As a key step to achieve the poverty reduction target by 2020, Guangxi requested all poverty counties to accelerate the implementation of infrastructure projects by proactively selecting and preparing infrastructure investment projects in three-year pipeline.²⁴ All pipeline projects should be in alignment with poverty reduction plan, and necessary procedures of project proposal selection and assessments have been specified in the government circular. The selected pipeline projects are then recorded in a database. Only the projects in the database are eligible for being included in the annual fund use plan of CPRP for implementation. The pipeline projects are dynamically adjusted to reflect the changing poverty reduction priorities. Thus, it is critical to ensure the three-year rolling pipeline database are concrete enough to secure adequate absorptive capacity and effective usage of CPRP.

126. Technical soundness. Guangxi regional government has provided clear guidance on infrastructure project management for its poverty reduction program. The guidance specifies the full cycle of project management covering project selection, feasibility study, technical design, fiscal assessment, environment impact assessment, budgeting, implementation, procurement, verification and auditing. The technical assessment confirmed that counties generally follow the Regional Government's requirement in infrastructure project management. Nevertheless, the poverty county governments face challenges to solicit and prepare the projects adequate for absorbing the increased funding available for poverty reduction program. To improve the efficiency of project preparation, technical assessment recommends that Guangxi develop an IT-based project management system, and deploy this system to all poverty counties. The development of this system will be built on earlier successful pilot in Du'an county, where an IT-based sub-project database has significantly improved the accuracy of database and reduced the labor requirements by automatically generating projects information. In addition to automated reports, the proposed system would integrate processes of project preparation including data entry, review and approval, authorization, public disclosure, documents filing, etc. By doing so, it expects to strengthen the project quality control, enable real-time monitoring, and allow informed decision to better align infrastructure projects with the poverty reduction priorities and the needs of poverty households and villages.

127. Institutional arrangements. PROs of county governments take main responsibility for infrastructure projects preparation with technical inputs from other line agencies involved in the poverty reduction program implementation. Guangxi RPRO takes a major supervisory and technical supporting responsibility. Guangxi RPRO will develop an information system for infrastructure projects preparation, prepare and issue users' manual and guidelines, provide training to county officials and monitor and evaluate county governments' adoption of this system. To incentivize the compliance, financial rewards will be provided to good performing counties.

²⁴ "Guangxi Regional Government's Circular on Accelerating the Implementation of Four-Types of Infrastructure Investment Projects for Poverty Reduction" [*Guizhengbanfa*, No. 62, 2016]

Result Area 3: Cross-cutting Issues for Enhanced Program Implementation

128. This Results Area aims to support improvement of the institutional arrangements and capacity by enabling Guangxi to plan, monitor and evaluate the PforR implementation and the results achieved by county governments in a timely manner; motivating county governments to achieve poverty eradication targets; and enhancing their implementation capacity. Guangxi poverty reduction program is a continuing success, which is supported by strong government leadership, substantial and increasing funding, and broad assistance from society. It has brought about 18 percent annual reduction in rural poverty from 4.675 million poor in 2013 to 2.614 million poor in 2016.²⁵ The consolidation of the poverty reduction funding at the county level should further enhance Guangxi's poverty reduction work by increasing the counties' abilities to tailor poverty reduction actions to the actual needs and opportunities at the local levels. While the expenditure framework in Guangxi is adequate, there is still room for enhancement of effectiveness and efficiency of the implementation of various poverty reduction activities by the region through better tracking the counties' budget expenditures, and for counties to better plan, prioritize and timely execute their poverty reduction activities, particularly because the goal of poverty eradication would require an even faster poverty reduction pace in the years to come. The key activities included in the PforR are clustered in the following two pillars: (i) Strengthening of public finance management for the CPRP expenditures, including improvement of annual planning process, prioritizing, monitoring and reporting the use of the CPRP funds by designated poverty counties; and (ii) Enhanced monitoring and evaluation through better utilization of various Guangxi's poverty databases and improved real-time analysis. Finally, the proposed PforR creates institutional capacities that enable the government to continuously improve program efficiency and effectiveness through the introduction of program budgeting and enhanced M&E. One aspect of this M&E system would be to monitor the adaptation and mitigation actions proposed under the PforR for improved results.

i. More efficient and effective program budget plan, execution and monitoring

129. Strategic relevance. The activities supported under this PforR are to strengthen the Regions' public finance management systems with an aim to enhance the impact and efficiency of CPRP expenditures, through: (i) Automated pooling of CPRF at county level; (ii) Improved alignment of CPRF outlays with poverty reduction strategy and programs; (iii) Strengthening of the annual planning process for use of CPRF by poor counties with potential for extending it over a 3-year period; (iv) Automated generation of CPRF implementation report; and (v) Capacity building for the improved CPRP implementation.

130. Chinese central authorities have recognized the importance of the quality of the CPRF for achieving the intended results. In December 2017, the State Council issued an opinion to call for exploring the mechanisms to sustain the long-term impact of the CPRF (*Guofa* No. 54, 2017). It highlights the principles of problem-driven, deregulation and decentralization (to county governments), and coordination across line agencies and across all tiers of government, with an aim to establish an institutional arrangement for the CPRF that are align administrative power and accountability, and expenditure responsibilities with financing. Recommended measures include integrating earmarked funds with similar objectives, establishing and integrating performance evaluation measures, allocating funds to lower-level governments together with the list of assignments, linking the fund use plan of the CPRF with poverty reduction plan, empowering county governments in using the CPRF according to local poverty reduction needs and strategy, establishing leading group and office for fund consolidation to improve the coordination of line agencies and enhancing transparency.

²⁵ Data provided by Guangxi Autonomous Region Poverty Reduction Office, referring to the 54 poverty-stricken counties using the eight Plus one Guangxi poverty concept.

131. Guangxi has pioneered in many areas recommended by the State Council. It is already supporting number of mechanisms for improved annual budget prioritization, budget planning, execution monitoring, and performance evaluations. All counties are required to produce an AFUP and Implementation Report, which set poverty reduction targets, the anticipated funds deployed and actual spending. As the consolidated funds are allocated by the central and regional governments to counties in batches, the AFUP is not immutable but adjusted via three rounds throughout the year, which allows for timely reaction to the updated information of consolidated funds, their execution and sub-project implementation progress. The counties also have an adequate sense of upper-level transfers for consolidated expenditure at the start of the year, and at the time of preparing the AFUP. Additionally, Guangxi province closely monitors the funds availability and payment progress in the province, as well as in each county on monthly basis. The budget execution is generally efficient with its burn rate above MOF's requirement. Finally, both the province and county engage in a series of annual performance evaluation exercises.

132. Technical soundness. While the province has put in place a strong framework to advance poverty reduction objectives through 2020, selected institutional actions could further support cross-county results. Poor counties are characterized by diverse poverty eradication challenges, as well as their capabilities. This translates into differing challenges for budget prioritization and execution. The technical assessment recommends that the PforR support the province's efforts to strengthen prioritization and timely budget execution of its poverty reduction funds.

133. CPRF involves 40+ sources and is distributed and appropriated by dozen central and regional line ministries which brings much complexity to the county governments in integrating the budget plan, prioritizing and reporting and tracking expenditures. Some counties that don't pool the CPRF, can only adjust the use of CPRF away from their originally designed usages at the margin. Some counties innovate a dummy budget unit for CPRF to temporarily hold all received funds and then deploy them to poverty reduction programs according to the local strategy and priorities. This automatic pooling not only gives full flexibility to the county in deploying the funds, but also substantially improves the accuracy and efficiency of CPRF expenditure tracking and reporting, thus allows the county government to timely monitor the program implementation of line agencies.

134. To further enhance county government's capacity in making informed decision, it is necessary to have CPRF budget expenditures being classified in line with poverty reduction sub-programs and objectives, which is a cornerstone of improving the efficiency and effectiveness of poverty reduction program. It is thus desirable for Guangxi DOF to introduce a unified CPRF expenditure classification system, which shall provide adequate details and reflect major poverty reduction sub-programs and objectives. This enables budget tracking of expenditures against output and achievements in terms of government poverty reduction goals. Guangxi Finance Department has been working with the Bank to develop a CPRF expenditure classification which will be applied to the county's AFUP and Implementation Report. An instruction guideline will be issued in 2018, as PAP action.

135. The timely preparation and disclosure of the robust AFUP for 2018, 2019, 2020 will provide for an important orientation and enhance accountability for all counties. Under the proposed PforR, the province can establish a minimum standard for all AFUPs, and ensure that implementation report can be enhanced against the AFUP details. The AFUP action translates both into a PforR DLIs, as well as PAP measures to support counties in the elaboration of AFUPs and poverty reduction activities/projects development and appraisal. The AFUP also provide a venue for the counties to clarify how they will address the industrial and infrastructure indicators committed to by the province under the PforR's other results areas. Guangxi is also committed to extend the CPRP budget horizon to three-year conditioned on the availability of indicative budget allocation of the CPRFs from the central government.

136. Institutional arrangements. Guangxi Province Finance Department with the support of the RPRO takes a major responsibility in developing the guidelines for the preparation of the annual fund use plan and implementation report of the CPRF, providing training to the county officials, monitoring and evaluating the compliance of counties with the province's guidance. To incentivize the compliance, financial rewards will be provided to good performing counties.

ii. Better poverty M&E systems

137. Strategic relevance. The M&E actions of the Guangxi 13th 5YP for Poverty Alleviation enable regional and county PRO authorities to know the poverty projects' performance under the program in terms of efficacy, efficiency and people satisfaction, as well as their results in terms of welfare under the multidimensional poverty approach (8 plus 1 'haves'). These M&E actions, allow the implementation of a double-loop learning. The first loop is aimed to the continuous verification if poverty projects have been implemented complying programmed standards in terms of coverage, efficiency & people satisfaction; and the second loop assess if welfare goals and strategy have been attained and enables their modification in the light of the evidence and findings.

138. Technical soundness. The proposed investments and activities for the monitoring and evaluation activities under 13th 5YP for Poverty Alleviation are generally technically sound, only a stronger link between budget information and poverty programs implementation could be done, as well as a better exploit of the rich existing M&E and poverty information to provide feedback to high rank authorities (double loop learning). There are M&E methodologies to regularly assess the poverty programs performance. The toolkit of M&E methodologies covers entirely the life cycle of poverty programs, including an integrated audit system, inspections to track poverty programs performance, users' satisfaction verification, civil service performance; an annual performance reports (completion report); and mechanisms of transparency and accountability. Using a WB's diagnostic toolkit to assess monitoring & evaluation activities of poverty reduction strategies, the technical assessment concluded that the M&E systems of the Guangxi Rural Poverty Reduction Program scored in the top decile of the scale.²⁶

139. The audit system of the Guangxi poverty reduction program considers all public administration levels. Provinces, municipalities and counties have a yearly audit, and could be randomly selected for a higher-level audit. Audits are focused mainly in budget execution analysis. The inspection system is focused on poverty program performance, covering topics such as capital use; procurement; quality of infrastructure; and, users and beneficiaries' satisfaction. The inspection system uses the third-party contracting mechanism to warrantee an independent assessment. Additionally, to the inspection, a cross performance evaluation among counties and provinces, provides an additional feedback mechanism to improve performance.

140. The M&E methodologies of the Guangxi poverty reduction program also cover civil service performance, quality assessment and annual completion reports. The quality system has two modalities, compliance to standards, and a participatory approach to empower the poor population. The first one mainly applied for capital use to verify the quality of infrastructure. The participatory approach starts with village leader's participation in project selection, later in verifying the quality of projects implementation and services delivered. A regular interview to poor households is realized to know the level of satisfaction of household's members. Performance assessment also cover civil service. Per the existing civil service's

²⁶ Assessment based on classification of M&E needs as per the reports: (i) Lahey, R. (2015) *Devising an Appropriate Strategy for Capacity Building of a National Monitoring and Evaluation System: Lessons from Selected African Countries*. The Nuts and Bolts of M&E Systems, No.33, World Bank and (ii) *Information. Monitoring and Evaluation in Practice: subnational strategies and tools in Mexico*. World Bank, Poverty and Equity Practice.

performance system, a bonus incentive is awarded according performance scores. Low performance is penalized with economic punishment, but moral, for example: circulating a criticized alert with the public servant name and case through a bulletin. If the failure is higher, the case goes to the disciplinary commission. Finally, an annual evaluation report, named completion report, is developed in a regional and county level. The report presents main problems, budget executed, results attained in terms of coverage, infrastructure, people satisfaction, and specially in terms of poverty reduction. However, apparently, there is not a deep analysis of the results in poverty reduction considering the 8 plus 1 approach, and their alignment with the budget allocation.

141. The Guangxi poverty reduction M&E systems also include a large collection of databases integrated into a single Data Platform to provide statistical base for monitoring the programs. The Data Platform (in consolidation process), which includes among others access to the NRPS, is expected to be available and operative by end of 2018. The source of data, indicators and system for poverty measurement are in place; however other relevant information from lines ministries involved in the implementation of the poverty programs are not yet fully integrated. The technical assessment indicates that the most relevant information to be uploaded to support this PforR, and the Guangxi poverty reduction program in general, are databases describing: information from PRLEs and cooperatives; information on budget and beneficiaries from training programs; information from Infrastructure Project management system; information on budget expenditures by county as per new expenditure categories.

142. The technical assessment finds that a potential challenge of the platform are the population and integration of relevant datasets, the compliance with quality standards for data access, integration and preservation, as well as the definition of roles and protocols for promoting the use of the data portal by main stakeholders of the poverty alleviation program at various levels of the public administration. The goal is that the data portal's content is reliable, is useful for M&E and is preserved in the long term..

143. Institutional arrangements. At national level the State Council Leading Group Office of Poverty Alleviation and Development of China (LGOP) plays the lead role in orchestrating a wide range of rural poverty reduction programs. The group is responsible for coordinating surveys and research projects; drafting guidelines, policies and plans for economic development in poor areas; coordinating solutions for key issues in poverty-alleviation development; supervising poverty-alleviation work; and organizing exchanges of experience.

144. At Guangxi province and counties visited, the implementation of the Poverty Reduction Program is clearly and efficiently coordinated among public agencies, with clear roles and tasks defined for every agency. The implementation is fully aligned to national poverty goals and strategy. There is a Comprehensive Coordination Group on charge of the implementation of the Poverty Alleviation Plan. The Poverty Reduction Office's Director is the Deputy Group Leader. The group has nine specialized team members representing the line agencies on charge of project implementation; however, the interaction with line agencies is almost delimited to their link with poverty programs, and not with the sectors dynamic. The M&E actions follows the life cycle of poverty programs in direct coordination with ministries involved such as Audit Office Ministry of Supervision, etc.

C. Institutional Arrangements for the PforR

145. The PforR would rely on existing structures and mechanisms used for implementing and monitoring the Guangxi poverty reduction program. Overall, the assessment concluded that in general, adequate capacity and commitment is in place to implement the Program. Guangxi has a comprehensive institutional structure in place, which supports the implementation of the program at the regional, municipal/prefectural, county, township and village levels. Responsible staff at each level of government must sign poverty reduction strategy documents for their area of jurisdiction on an annual basis, and are held accountable for

the realization of targets in those documents. The highest-level leadership of the province government provides overall guidance for the CPRP, while its execution is led by sectoral agencies and county governments in a coordinated manner.

146. Given the cross-disciplinary nature of the poverty reduction activities, the institutional coverage includes more than 20 agencies within the province government's structure. As the PforR works through the country systems, the assignment of data collection is aligned with the mandate of the government agencies. In order to mitigate the risk of fragmentation of implementation and data collection responsibilities, Guangxi has set up institutional arrangements with strong focus on central leadership and coordinating mechanism. The overall coordination of the program is carried out by the Regional Leading Group comprised of the governor (the Group Leader), the vice governors responsible for sectors covered in the plan (Deputy Leaders), and Director Generals of relevant departments. The Leading Group's Office (LGO) has been established within the Guangxi PRO serving as the secretariat to the Leading Group for day-to-day management and coordination of the CPRP data collection efforts. At the municipal/prefectural level, the Party Committees and mayors have overall responsibility for poverty reduction work within their jurisdictions, link their counties to the regional level plan, undertake supervision and inspection work, and focus on their counties' exit from poverty.

147. Implementation takes place at the county level, who bear the main responsibility for day-to-day poverty reduction work. As such, the institutional arrangement is a matrix that, in addition to the horizontal coordination, involves a vertical structure where each line agency is mirrored at the municipal/prefecture level and down to the county level. The county Party Secretary and magistrate are explicitly tasked with primary responsibility and accountability for achieving Guangxi's 2020 poverty reduction targets. The county Poverty Reduction Leading Groups and PROs undertake the detailed scheduling of poverty reduction actions, organize the delivery of specific projects, and orchestrate funding use and manpower deployment. Each county sets up a Funds Consolidation Office (FCO), which directly reports to the county Poverty Reduction Leading Group. Jointly with the county Finance Bureaus, the FCOs develop annual fund use plan (AFUP) for allocating the annual CPRP. Each activity defined in the annual fund use plan is assigned to a specific line agency which leads implementation of the activity.

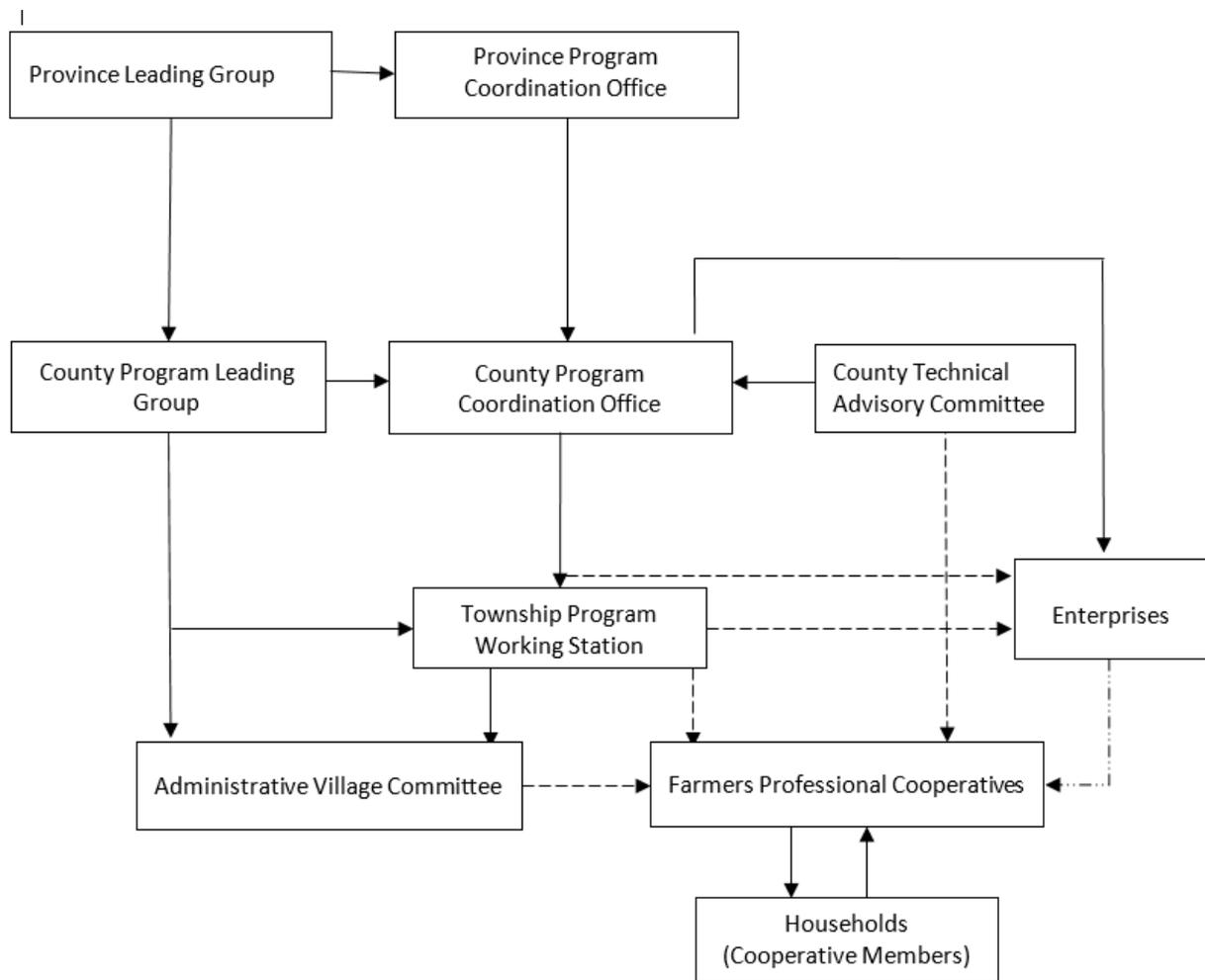
148. Township Party Committees and governments in designated poor counties also play a major role in implementing poverty reduction actions. In addition to the crucial task of assembling and digitally entering the NPRS system data on an annual basis, the township governments (i) manage human, financial, and material resources, and (ii) organize and implement projects which are undertaken at the township and lower levels. Most townships in the designated poor counties have six to seven full time staff working on poverty reduction activities.

149. Finally, Guangxi's Regional 13th 5YP for Poverty Reduction explicitly emphasize the important roles of cadres at the village level in poverty reduction work at the grass-roots level. Dynamic and committed cadres promote the work of the poor village supervision committee, and play a lead role in community mobilization. In addition to the NPRS system, which explicitly identifies and records the specific individuals responsible for assisting each poor household at the village level, additional qualified staff are sent down from the county and higher levels to reside in the poor townships and designated poor villages for extended periods of time to actively support poverty reduction work within the townships and villages.

150. Chinese Ministry of Finance will be the signatory of the IBRD Loan Agreement, while Guangxi Provincial Government will be the signatory of the Program Agreement (i.e. Chairman or Vice Chairman). The Leading Group of Guangxi Utilization of Foreign Loans will address the additional coordination and support required by the PforR. This leading group is chaired by vice province governor overseeing DRC and consisting of vice chief secretary of province government, Commissioner of DRC and Director-

Generals of DOF, PRO and DOA as vice chairmen, and deputy Director-Generals of 17 line-agencies as group members. A Coordination Office for the PforR is established with designated staff from PRO and DOA to liaise with the respective line departments involved in the implementation of the PforR, especially in the three results areas of the Program. The Program Coordination Office (PCO) will monitor the implementation of the Program, periodically report to the Leading Group about the Program progress, and facilitate the Bank's missions. The PCO will periodically convene meetings of all member departments as needed, and report the decisions of the steering committee to the Leading Group for approval. All targeted counties shall make similar institutional arrangement, including setting up leading group and coordination office. Program Working Station shall be established at each program townships and in program administrative villages, village committee will take responsibility for program implement. The **Error! Reference source not found.**5 presents the example of PforR institutional arrangements as applied to agricultural industrialization activities.

Figure 5: Institutional Arrangement Framework, Guangxi



D. Disbursement Arrangements

151. The Bank will advance to the borrower US\$100 million of the total PforR financing. When the DLI against which an advance has been disbursed is achieved, the amount of the advance will be deducted from the total amount due to be disbursed under such DLI. The Bank will record an amount of the advance as disbursed for an achieved Disbursement Linked Result (“recovered”) after it has notified the Borrower of its acceptance of the evidence of achievement of the result for which the advance was provided. The amount so reclassified will become available for further advances in accordance with the preceding paragraph.

152. Each participating agency will be responsible for verifying the achievements of the DLIs under its purview, through independent third-party verification agencies (VAs), based on the agreed verification protocol. It is expected that Guangxi will recruit a total of four VAs by their technical focus area: one VA to cover DLIs related to agricultural industrialization activities; one for skills training and drinking water supply each; and one for infrastructure IT platform and M&E systems. The VAs are expected to have an established technical track record of implementation and/or evaluation of the relevant Government programs supported under the PforR.

153. There is a risk of independence of third-party VAs, which could affect the degree of objectivity of the verification of DLIs data and their protocols. The risk mitigation measures include: (i) the selection of VAs will be managed by the Program Coordinating Office of Leading Group, which is parallel structure to the agencies which are accountable for achieving the DLIs; and (ii) the Bank team will agree with the Government on VA profile (or identity if feasible), the technical components of their terms of reference and their selection process by appraisal.

154. The Guangxi DRC will be responsible for collecting the reports from each provincial agency participating in the PforR and respective independent verifications and will periodically submit a consolidated report to Guangxi RDOF. Guangxi RDOF will prepare disbursement applications and submit them to the Bank.

155. Disbursements will be made upon verification of the results of the DLIs. The actual disbursed amount will depend on the verified results as all DLIs are scalable except DLI 8. The annual DLIs targets are indicative. The Guangxi RDOF can apply for reimbursement as soon as it meets targets and provides the necessary documentation. The Guangxi RDOF can also ask to be reimbursed for any results achieved beyond the indicative annual target up to the total PforR target and amount allocated for the respective DLI.

III. DESCRIPTION AND ASSESSMENT OF PROGRAM EXPENDITURE FRAMEWORK

The Expenditure Framework Assessment (EFA) was conducted based on information provided by Guangxi Department of Finance, a review of poverty reduction program performance assessment, and three representative county case studies. The EFA included the following dimensions: (i) fiscal sustainability and resource predictability; (ii) well-functioning budget allocation and execution; and (iii) incentives for efficient service delivery and value for money.

156. Key characteristics of the Guangxi Consolidated Poverty Reduction Program (CPRP) financing are: (i) consolidation of 40+ agriculture-related funds from central, regional and sub-regional levels at the county level to finance the county’s poverty reduction program priorities, (ii) a strong focus on meeting multi-dimensional poverty eradication goal through 2020 with accurate target at poverty households and poverty villages, and (iii) regional government’s close monitoring over county governments’ progress toward poverty eradication goal.

157. The duration of the PforR is from 2018 to 2021. The expenditure framework of the PforR will be a total of US\$5,529 million, of which 93 percent will be financed by the Government and 7 percent by IBRD Loan. The Government will fund US\$ 5129 million equivalent whereas IBRD loan will fund 400 million. As Guangxi plans for achieving the poverty eradication goal by 2020, most expenditures will be incurred before end-2020, and the remaining expenditures in 2021 are expected to be illegible, mainly for results verification and reimbursement.

158. In terms of expenditures outlay, about 39 percent, or US\$ 2.2 billion will support the industrial development for poverty reduction; US\$3.2 billion will improve the poverty households access to infrastructure; and the remaining US\$81 million will finance the cross-cutting implementation support activities. Table 8 below provides an overview of the main elements in the expenditure framework of the PforR.

Table 8: The Program Expenditure Framework by Results Areas, 2018-2020 (US\$ million)

	Amount	Share
The Program Total	5,529	100%
RA1. Improved Income Generation for Rural Poor	2,273	41%
RA2. Improved Infrastructure for Rural Poor	3,175	57%
RA3. Cross-cutting Issues for Enhanced Program Implementation	81	1%

159. The expenditure framework presents an adequate basis for this PforR. The consolidation of a range of different agriculture-related funds at the county level in 2017 provides a strong impetus of achieving the government’s 2020 poverty eradication targets. Fiscal resources being channeled in particular to the Guangxi’s designated 28 poverty counties continue to be scaled up to achieve China’s commitment to poverty eradication at the highest level. Budgets appear adequate and aggregated fiscal sustainability issues were not identified as a core concern associated with the expenditures. The central and regional governments finance about 93 percent of Poverty Reduction Program of the poverty counties in 2017. Both the central and regional governments are committed to gear more budgets toward the poverty counties. Poverty county governments have now been put fully in the driver’s seat for achieving effective, efficient, and sustainable programs and activities to transition and maintain households out of poverty. The program implementation is generally efficient, with budget burning rate at 95% in 2017, far above the requirement of the central government or national average.

A. Expenditure Scope

160. The expenditure framework of this PforR consists of two parts, one is carried out by the 28 counties and the other is carried out by the province government. As the responsibility for translating the national/regional vision into action plans mainly rests with poverty county governments, the PforR expenditure framework is dominated by those managed by county governments. The county governments’ program mainly finances small size infrastructure investments in civil works and goods, consulting services, training and workshops, and subsidies in four main areas -- supporting agricultural industrialization for poverty reduction; education and health care subsidies for poverty households; investment and maintenance of rural infrastructure and village public facilities; resettlement and administrative activities. The province government oversees and support county governments, including development of IT-based infrastructure investment projects management system and the Big Data Platform for M&E. The high risks activities identified through ESSA and the big value contracts will be excluded from the PforR expenditure framework, such as the resettlement activities in county government program.

161. Table 9 presents the projected outlays of the program expenditure framework in 2018-2021, and compares it with that of the Government program (covering all 54 poverty counties) in 2017. As it shows,

the PforR incentivizes government to spend more on industrialization (support to enterprises and cooperatives in particular) and vocational training (e.g. activities with highest impact on income growth) and implementation support for improved program efficiency. In terms of implementing governments, the county governments accounts for 99.2 percent, and the province takes only a small share of 0.8 percent. In terms of activities, of total US\$5.529 billion expenditures, activities supporting agriculture industrialization costs 39 percent, education and training costs 2 percent, infrastructure and village public facilities costs most 57 percent, and other management cost of county and province together costs only 1.5 percent. Counties may further prioritize their expenditures in the next 3 years according to their distance toward the final goal of poverty reduction.

Table 9: Outlay of the Program Expenditure Framework, by programs

	The Government Program in 2017 (All 54 Poverty Counties)		The PforR 2018-2021 (Selected 28 Poverty Counties)	
	US\$ million	Share	US\$ million	Share
Total	3,055	100.0%	5,529	100.0%
I. County CPRF	3,047	99.7%	5,484	99.2%
1.1 Supporting Agriculture Industrialization (Chan Ye Fu Pin)	1,108	36.3%	2,163	39.1%
Village collective Economy	234	7.7%	417	7.5%
Households	343	11.2%	607	11.0%
Cooperatives	61	2.0%	120	2.2%
Forest Farm and Ecology	153	5.0%	312	5.7%
Poverty-Supporting Enterprises	18	0.6%	259	4.7%
Access to Credit	204	6.7%	340	6.2%
Others	95	3.1%	108	1.9%
1.2 Education and Training	48	1.6%	110	2.0%
Education Subsidies	44	1.4%	83	1.5%
Vocational Training	4	0.1%	27	0.5%
1.3 Rural Infrastructure and Village Public Facilities	1,739	56.9%	3,175	57.4%
Village public facilities	227	7.4%	468	8.5%
Roads and Bridges	758	24.8%	1,541	27.9%
Water	372	12.2%	534	9.7%
Sanitation	68	2.2%	98	1.8%
Damaged House Rehabilitation	220	7.2%	426	7.7%
Others	95	3.1%	108	1.9%
1.4 Resettlement	134	4.4%		
1.5 County Program Management	18	0.6%	37	0.7%
II. Regional Poverty Reduction Program Supervision & Support	8	0.3%	44	0.8%

Data Source: Guangxi Department of Finance

B. Program Financing

Source of financing

162. Of the total amount of the PforR expenditure framework US\$5.5 billion, 93 percent will be financed by the Government and 7 percent by IBRD Loan. The Government will fund US\$ 5.1 billion equivalent whereas IBRD loan will fund 400 million. Of the government funded expenditures, the province activities are financed by the regional general budget, and the county activities are financed through the consolidated poverty reduction funds, and mainly from the central and regional government transfers, including 20 earmarked funds from the Central government, and 23 earmarked funds from the province government. While no co-financing from the municipality and counties is required, many municipality and county governments still make contribution to CPRF from their own budget. In 2017, of the total CPRF 20.6 billion RMB Guangxi received for all 54 poverty counties, 55.8 percent are from the central government and 37.6 percent are from province government. Table 10 lists the major earmarked funds from the central and province governments. The 28 targeted counties received slightly more from the central government, which indicates the central government's priority attached to the national poverty counties (relatively poorer).

163. All these contributions are consolidated into a fund pool for supporting the implementation of on-going government poverty reduction programs at county level. While these different funds are appropriated by a variety of line agencies, the county governments are empowered to allocate the funds at their own discretion to better fit their local poverty reduction needs, as per national and regional guidelines. The PforR operation will provide additional fiscal incentive to 28 designated poverty counties to achieve the poverty eradication goal. And the IBRD loan, though not being integrated in CPRF, will be used to finance rural industrialization and rural infrastructure and skill training activities in the 28 targeted counties to sustain the achievement of poverty reduction program supported by this PforR.

Table 10: Funding Sources of Consolidated Poverty Reduction Program in 2017

	The Whole Province (All 54 Poverty Counties)		The Program Counties Total (Selected 28 Poverty Counties)	
	Value (US\$ mil)	Share	Value (US\$ mil)	Share
<i>Total Fund Received</i>	3051	100%	1736	100%
Central Government	1702	55.8%	994	57.3%
ow. Fiscal Fund Earmarked for Poverty	560	18.3%	326	18.8%
Water Supply Fund	290	9.5%	140	8.0%
Vehicle Purchase Tax Incomes for	236	7.7%	160	9.2%
Forest Development	145	4.8%	95	5.4%
Comprehensive Rural Reforms	118	3.9%	64	3.7%
Regional Government	1146	37.6%	625	36.0%
ow. Fiscal Fund Earmarked for Poverty	411	13.5%	238	13.7%
Reward-for-subsidies of village	132	4.3%	76	4.4%
community-driven program				
Land Revenue for High-Standard	110	3.6%	43	2.5%
Basic Farmland Construction				
Subsidies to Rural Damaged House	95	3.1%	56	3.2%
Rehabilitation				
Beautiful Guangxi Fund	81	2.7%	43	2.5%
Municipality	87	2.9%	47	2.7%
County	115	3.8%	70	4.0%

Data Source: Guangxi Department of Finance

Adequacy and Sustainability

164. Budgets appear adequate in a sustainable way, in view of consolidated expenditure framework which presents a strong support for counties to effectively implement the poverty reduction program. The Central and Guangxi Governments highlight the Poverty Eradication by 2020 as their top priority in their work agenda, and have significantly increased transfers to localities with highest poverty population. The above mentioned five major funding sources of consolidated funds for 54 poverty counties increased by 36 percent from 2016 to 2017. And the top two contributions, central and regional government's Fiscal Fund earmarked for Poverty Reduction, increased by 69 and 110 percent respectively. The fund consolidation gave additional push to the total financing for poverty reduction program, reaching US\$3 billion in 2017 as measured by the total CPRF, which accounts for 4.2 percent of the whole province public finance expenditures, or 9.2 percent of all county governments' total public finance expenditures in Guangxi.

165. The central government pledged that the total transfer from the Central Government's Budget would grow at a rate higher than the central government's revenues. And Guangxi Government also committed to further increasing budget allocation to poverty reduction program through the 13th five-year plan period. Of the annual increase of Guangxi public finance revenues, 10-20% will be allocated to poverty reduction program. If Guangxi runs fiscal surplus, over 50 percent of the budget surplus will be topped up to the poverty reduction program.²⁷

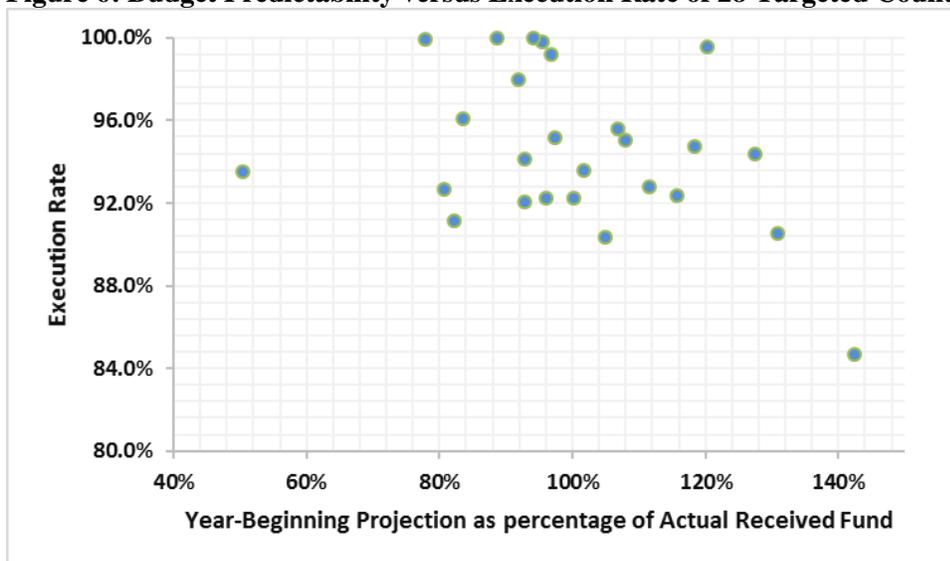
Budget Predictability

166. Budgets is expected to be predictable, and in full synchronization with local government budgeting cycle. China has a well-established budget plan, mid-term budget review and execution monitoring and reporting system. One major weakness of the budgeting system is the delayed approval and authorization by the People's Congress for the government budget. While the fiscal year starts from January 1st, the Annual Plenum of People's Congress is scheduled in March at the national level and in January/February in Guangxi province. To enable county governments executing the budget plans from the beginning of the year, the MoF informs the provinces about their respective indicative budget allocations for major earmarked funds for poverty reduction program. The three representative counties received 27-65 percent of CPRF 2017 budget in December 2016, and accumulatively over 90 percent by August 2017. Considering the delay in budget appropriation, the central government allows counties to carry over the unspent budget by six months in the following year.

167. Guangxi DOF further improves the budget predictability by informing county governments their indicative annual CPRF budget allocation of the coming budget year in each December. This enables counties to formulate their annual fund use plan. For the 28 targeted counties as a total, the projected CPRF at the beginning of 2017 is equivalent to 99 percent of the actual funds received. Nevertheless, variation across counties is large, with the highest ratio of 142.5 percent and the lowest ratio of 50.4 percent, though the assessment doesn't find this significantly affects budget execution rate (Figure 6).

²⁷ Source: Guangxi 13th 5-Year Plan for Rural Poverty Reduction

Figure 6: Budget Predictability versus Execution Rate of 28 Targeted Counties in 2017



Data Source: Guangxi Department of Finance and staff calculations

168. Guangxi DOF is committed to implementing three-year rolling budget for CPRF. However, given their high reliance on the finance of the central government transfer, it currently is infeasible unless the central government line ministries provide three-year indicative budget allocation.

169. Overall, program budgeting follows a reasonable process, are prepared timely and provide flexibility at the local level to match funding to priority needs, though efforts should be made to improve predictability of funding availability through preparing 3 years rolling-plan.

C. Expenditure Performance

170. The quality of poverty reduction expenditure program in Guangxi will be critical to achieving the government’s intended results. Under the scheme of CPRF, the county governments are taking main accountability for developing and implementing the program. The current expenditure management system at the county level provides adequate assurance of effectiveness and efficiency of expenditure program through (i) alignment of expenditure program with the poverty reduction strategy; (ii) quality control of projects; (iii) efficient budget execution; (iv) continued learning and improvement; and (v) public consultation and scrutiny.

171. The poverty counties in Guangxi can prioritize programs, activities, and project expenditures in line with the poverty reduction strategy and plan. Guangxi’s 13th 5YP for Poverty Reduction provides an overall vision and targets for all county governments by 2020, and also formulates a strategy of implementation with a specific package of poverty reduction sub-programs. Per Guangxi’s guidance, each county drafted a local 13th five-year poverty reduction plan that is tailored to the local context. And at the beginning of the year, each county formulates an annual fund use plan (AFUP) for CPRF, which sets how the anticipated CPRF will be deployed to the programs proposed in the 13th FYP. The AFUP is produced and maintained with dynamic adjustments, in line with the variation of budget allocation from upper-level government. As the consolidated funds are allocated by the central and regional governments to counties in batching, the AFUP is not immutable but adjusted via three rounds budget adjustment processes at the beginning, middle and end of the year, in timely response to the updated information of funds appropriation and execution progress.

172. Poverty Counties in Guangxi also adopted a sound regime for selecting candidate projects for poverty reduction program. The candidate projects are proposed by each line agencies, townships and villages. And they are subject to the quality screening in terms of alignment with poverty reduction goals, soundness of technical design and cost-benefits assessments. The qualified projects are recorded in the pipeline project database for all poverty reduction activities to be carried out by 2020²⁸. Only the projects in the pipeline database and reaching the status of ready-for-implementation are eligible to be included in the AFUP. While the pipeline project management system is generally sound across all poverty counties, the practice and the quality of the system varies. Some counties, such as Du'an County, have developed an IT-based pipeline project management system and enabled timely and efficient monitoring and reporting of pipeline projects preparation and implementation. Guangxi has committed to scaling up such a good practice to all poverty counties. Please refer to the section (iii) in result Area 2 above for detailed discussion.

173. The Program budget outlay is generally consistent with poverty reduction priorities. This is well reflected in the variation of the CPRF outlay composition across the targeted counties. For instance, the share of supporting agricultural industrialization subprogram in the county's CPRF ranges from 21 percent to 59 percent, while the share of infrastructure ranges from 22 percent to 76 percent (see Table 9 for additional details). However, the assessment through the interviews in the 3 representative counties found generally inadequate fiscal input to vocational training subprogram despite of recognition of its significant poverty reduction impact. Guangxi committed to increasing budget allocation and expanding vocational training sub-program.

174. Budget execution is generally efficient, with budget execution rate (actual expenditure at year-end over budgeted outlay) at around 94.5% in 2017, far above the requirement of the central government or national average. The national minimum standard for budget execution of CPRF is 90%. Of all 28 Targeted counties, only 1 county's execution rate is below 90 percent, while 8 counties over 98 percent. In terms of sub-programs, rural infrastructure and village public facilities sub-program faces the biggest challenge, with execution rate at 92.4 percent, and particularly water projects (90 percent) and damaged houses rehabilitation (89 percent). Of the agriculture industrialization sub-program, activities related to supporting rural cooperatives was executed slowest, 92.3 percent. Of Education and Training sub-program, direct expenditure subsidies were executed well, but only 91.6 percent outlay to vocational training activities was executed during the year (Table 11). The PforR operation will focus its intervention in those big but relatively weak areas.

²⁸ *Guikaibanfa [2017] 44 (桂开办发[2017]44号)*

Table 11: Budget Execution Rate of 28 Targeted Counties by Major Sub-Programs in 2017

Total	95%
I. Supporting Agriculture Industrialization (Chan Ye Fu Pin)	97%
Village collective Economy	98%
Households	95%
Cooperatives	92%
Forest Farm and Ecology	97%
Poverty-Supporting Enterprises	100%
Access to Credit	101%
II. Education and Training	97%
Education Subsidies	97%
Vocational Training	92%
III. Rural Infrastructure and Village Public Facilities	93%
Village public facilities	91%
Roads and Bridges	96%
Water	90%
Sanitation	93%
Damaged House Rehabilitation	89%

Data Source: Guangxi Department of Finance

175. All counties regularly monitor and report budget execution of CPRF in the template per the guidance of the central MOF. All counties have prepared and submitted the monthly budget execution reports to the Agriculture Division of Regional Finance Department which prepares the consolidated report for all counties and submits to MOF once two months. Guangxi DOF closely monitors the budget execution rate of all poverty counties, and factors this in the performance evaluation of counties poverty reduction program. While all poverty counties can meet this reporting requirement, some counties developed a scheme that enables automatic pooling and aggregation of budget execution data of activities supported by CPRF, the others still rely on manual process. The current template developed by the central MOF doesn't reflect the outlay of Guangxi poverty reduction sub-programs. Guangxi DOF, with the support of this operation, is developing 1) program-based CPRF expenditure classification approach that categorizes expenditures in alignment with Guangxi's poverty reduction sub-programs, and 2) an IT-based budget execution reporting system. More details can be found in section (iii) of Result Area 2 above.

176. Guangxi has developed a comprehensive performance management regime for poverty reduction expenditure program. Major factors being considered in the performance evaluation include the adequacy of budget allocation, alignment with the poverty reduction strategy, sound regime of budget management, accuracy of expenditure program's targeting at poverty households, timeliness of budget appropriation and efficiency of budget execution. As of 2017, more weights will be given to the efficiency of expenditures program. Guangxi DOF uses the results of performance evaluation to identify implementation challenges, improve the expenditure management system and inform the next round of budget allocation. By doing so, a virtual cycle of rewarding, self-learning and continued improvement (what is called the double-loop learning in M&E systems), has been developed. Similarly, counties also conduct yearly self-performance review of poverty reduction program of major line agencies and request correction measures whenever misconduct and malpractice is identified.

177. Guangxi government attached great significance to the budget transparency, which enables public scrutiny to further ensure the performance of expenditure program. All counties are required to publish its consolidated fund use plan and execution report in the government official website. In

soliciting pipeline projects for poverty reduction program, the project proposal shall pass the public consultation at village community with participation of poverty households. The information of budget appropriation to finance the village public facilities and subsidize the poverty households or dragon-head firms/cooperatives are publicized in the village hall/plaza.

D. Recommendations

178. The general expenditure framework for the PforR appears to be adequate, but challenges the capacity of county governments by the decentralized nature of prioritization and implementation of activities supported under the PforR. Improvements in expenditure tracking will therefore be vital to informing repeated annual budget prioritization, but above all execution tracking. Expenditure monitoring will now need to ensure expenditure tracking granularity is adequate for the PforR, notably as it relates to the priority outcome indicators. Greater use of on-line and mainstream project management systems could also progressively improve project management, while reducing workloads.

179. The EFA recommends a set of targeted measures to buttress the impact of the PforR, especially to achieve the government’s 2020 poverty reduction targets.

- An IT-based Infrastructure Project Management System to be developed by Guangxi Poverty Reduction Office and adopted by all counties. In addition to the general data warehouse, the system integrates appropriate project management control procedures, standardizes project report, and improves working efficiency (DLI6);
- Instead of the current expenditures reporting focusing on the aggregated budget execution progress to meet MOF’s minimum requirement, expenditure tracking in alignment with development objective and poverty reduction plan should be executed. Guangxi DOF improves the annual reporting as program based with detailed categories reflecting the government’s major sub-programs (DLI7);
- To plan the expenditure program toward the achievement of 2020 poverty reduction goal, poverty counties shall develop three-year rolling fiscal plan for the CPRF. The feasibility of such a plan is conditioned on the predictability of central and regional governments’ transfers for poverty reduction program; and
- An integrated Consolidated Fund program-based performance monitoring report to be prepared annually. Guangxi DOF shall closely monitor and evaluate the program performance of CPRF, and use the performance evaluation results to inform the budget allocation, and hold each counties and line departments accountable for delivering their respective results.

IV. DESCRIPTION AND ASSESSMENT OF PROGRAM RESULTS FRAMEWORK AND M&E

180. The PforR development objective is to enhance the impact and efficiency of the Guangxi Consolidated Poverty Reduction Program in the targeted PforR geographic areas.

181. This PDO addresses the necessary conditions for the government to achieve 2020 target under its eight plus one “haves”, multi-dimensional poverty eradication criteria. However, such reduction of poverty to be achieved under the PforR, might not be sufficient to meet the Government rural poverty reduction target because: (i) the PforR funding would make up a small share the total consolidated poverty reduction funding in the targeted 28 counties and (ii) there are other earmarked sectoral poverty reduction funds outside consolidated poverty reduction funding arrangements. Therefore, the PDO focuses on measurable and achievable poverty reduction targets from the Result Ares supported under the PforR.

182. The proposed PDO indicators:

- PDO Indicator 1: Production income of registered poor households in targeted counties.
- PDO Indicator 2: Percentage of registered households with access to selected infrastructure assets according to 8+1 poverty criteria in targeted counties.
- PDO Indicator 3: Integrated Consolidated Fund Program-based Performance Monitoring Report.

183. The PDO indicators 1 and 2 would measure the impact of the PforR through increased income growth rates and infrastructure access. The PDO indicator 3 would measure the availability of the institutional foundation for the performance informed budgeting, the institutional enhancement effect of the PforR.

Results Area 1 Improved Income Generation of the Poor

184. The strengthening of leading enterprises and cooperatives in poor counties should translate into increased production incomes for the poor. The results chain focuses on strengthening the presence of enterprises and farmer cooperatives that are most likely to induce income linkages for the poor. The PforR Result Chain below includes three DLIs designed to support the presence of these types of enterprises and linkages in the poor countries. Two DLI's focus on the selection of leading enterprises and their purchases. A precondition/input to this results chain are the preparation of new guidelines and selection criteria, with the outcome being the selection the new batch of firms. For cooperatives, the emphasis is on strengthening effectively functioning cooperatives.

185. The Government is taking a multi-pronged approach to improv the productive incomes of the rural poor on the demand and supply side. The demand side refers to greater market demand for products and services provided by the archive poor in the targeted counties. The supply side concerns the ability of the archive poor to meet this demand through access to market information, skills training, local infrastructure such as roads and water, and institutional support. The result chain indicators seek to capture the demand and supply aspects of these interventions to poverty reduction impacts through the productive income channel.

186. Demand market linkages in counties and villages with a high poverty concentration have tended to lack dynamism. Guagnxi's impressive gains in significantly upgrading basic infrastructure to provide near universal all weather road access to all villages is now amplifying the need to address "soft" barriers to market access. China has a growing urban-based demand for organic, pollution-free, and other quality food products with strong local characteristics but producers need to meet consumer preferences for food variety, food safety, nutrition, and ethics. This could offer new opportunities for poverty reduction in more marginal poor areas which possess unique agro-ecological conditions and are less exposed to industrial pollution, provided that producers are able to meet consumer preferences.

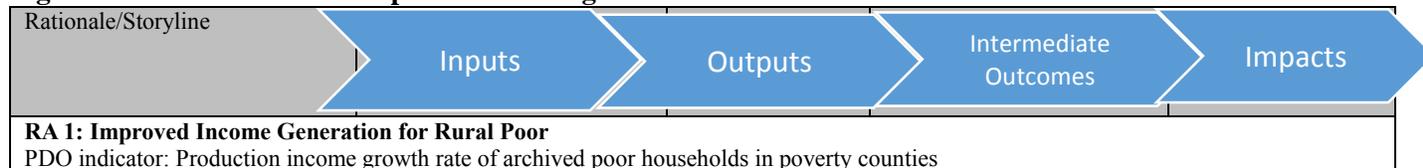
187. PRLEs are particularly well placed to signal to these previously marginalized areas where market demand lies, and building value chains that respond both to consumer needs. In today's food markets, new economic value will be derived less from local processing than from improved linkages to end consumers in urban areas. Dynamic agribusinesses that are already close to consumers in high-end urban markets can also shorten value chains by sourcing produce directly from producers in poor areas. Their focus is not on quantity but on the creation of value through quality, safety of food products, and innovative marketing strategies. Indications of responsive supply should also crowd in further demand from firms, providing farmers which choice in terms of how to best take advantage of market linkages.

188. The proposed PforR demand linkages refer to both geographic and household poverty reduction targeting. The entry of PRLEs into poor counties will provide an “announcement effect” in terms of what the market is seeking. The results indicator for presence of PRLEs in targeted counties captures this market signal effect. A further measure would capture the diversity of products demanded by these PRLEs. This could be captured by the number of raw and processed inputs demanded by these firms. PRLEs can report their gross purchases in priority counties, but not break down these purchases to archive poor households (either those that have crossed the poverty line or are due to exit by 2020). This measure is captured indirectly by the productive income variable from the national archive.

189. The proposed PforR income generating impact is expected to be highest on those poor rural households where agriculture remains the main source of livelihood. At the same time income generation can also be expected for households, for which agricultural activities have become complementary source of income (e.g. households where women or elderly continue to farm, while the main source of income comes from off-farm employment). However, the agricultural restructuring involving leading poverty reduction enterprise and pro-poor farmers cooperatives is facilitating the on-going rural transformation process, and is broadening the livelihood choices for those rural household who choose to leave farming.

190. Adequate vocational training will be integral for farmers who remain in the agricultural sector in the poor counties. Strengthening the professional skills among farmers will also increase their likelihood of availing of market linkages, particularly through linkages with PRLEs and farmer cooperatives. This group will thereby be able to avert migration to urban areas, or to fall on welfare payments. Based on the Result Chain (Figure 7), the PforR includes four DLIs for this Result Area, designed to provide incentives for reaching income growth targets of the government program.

Figure 7: Results Chain for improved income generation



<p>Development of agriculture value chains is critical for long-term for sustainable agriculture based incomes.</p> <p>Value chains development requires investment by private sector in processing, marketing, logistics, etc.</p> <p>Current government support to agricultural industrialization lacks clear poverty reduction linkages (outreach and benefit sharing with poverty households).</p> <p>Government Degree No. 62 stipulates a shift from general enterprise support to pro-poor investments by poverty reduction leading enterprises.</p> <p>Purchases by PRLE represent clear indication of market linkages for local economy, and poor rural households in particular</p>	<p>Develop detailed implementation guidance for Decree 62 (to be done by Regional Government.</p> <p>Develop a data base for capturing enterprises entering Decree 62 support program and capturing investment data). PAP</p> <p>Subsidies and policy incentives provided to enterprises</p>	<p>DLI 1: Number of enterprises accredited as Poverty Reduction Leading Enterprises.</p>	<p>Purchases in poor counties expected to increase beyond past enterprises purchasing and investment data trends.</p> <p>DLI3: Value of annual purchases of agricultural products by Poverty Reduction Leading Enterprises from farmers and farmer cooperatives</p>	<p>Income increase for poor households</p>
<p>Organizing poor farmers in cooperatives is an effective approach for entering into modern value chains, and providing services.</p> <p>Cooperatives offer a range of economic and income generating opportunities.</p> <p>Recent Government policies encourage the development of farmer cooperatives.</p> <p>A significant number of farmer cooperatives exist in Guangxi (~ 44,000, of which ~ 13,000 are located in targeted counties).</p> <p>Only a small proportion of those cooperative meet the requirements and standards set under the national law.</p>	<p>Performance standards for cooperatives defined in line with the existing cooperative law (governance, outreach to poor, financial transparency and accountability, profit sharing).</p> <p>The existing web-based registration and annual performance recording system for cooperatives used for M&E purposes.</p> <p>Supplementary data layer added to the existing data system, which would record the operational performance standards for cooperatives.</p>		<p>DLI 2: Number of Pro-poor Farmer Professional Cooperatives meeting Operational Standards.</p>	
<p>Skill gaps are a barrier for the poor to secure income opportunities both in farm and non-farm sectors.</p> <p>New Professional Farmers Development Program provides effective mechanism for poor to better realize income opportunities</p>	<p>More farmers (including archived poor farmers and female farmers) participate in effective training programs through building capacity of training institutes and organizing knowledge sharing workshops.</p>	<p>DLI4: Number of farmers completing the New Professional Farmers Development training program</p>	<p>Farmers satisfied with the training services</p>	<p>Capacity for self-development improved</p>

DLI 1: Number of enterprises accredited as Poverty Reduction Leading Enterprises.

191. Rationale. The “2011 Outline” calls for efforts be made to foster “featured pillar industries to lead poor households to income growth”, and supports leading enterprises, farmers’ cooperatives and mutual aid fund organizations that will lead and assist poor households to develop production”. The State Council Leading Group Office of Poverty Alleviation and Development (LGOPAD) relaunched a ‘Poverty Reduction Leading Enterprise (PRLE) program by a document from January 4, 2018 (Document No. 62), which guides the Government Recognition and Management of leading enterprises for Poverty Alleviation. This program offers an opportunity for a qualitative up-grading of the on-going agricultural leading enterprise support program by supporting enterprises with a specific poverty focus in agriculture-related industries.

192. The Document No. 62 outlines a new policy and provides strategic framework for the engagement of PRLEs in the poverty alleviation efforts. The RPRO will draft the detailed Working and Implementation Plan for the Accreditation and Management of Poverty Reduction Leading Enterprises in Guangxi (Accreditation and Management Workplan) for the accreditation and monitoring the poverty reduction impacts of the selected leading enterprises, which will be reviewed by the Bank (PAP action). The Accreditation and Management Workplan will clearly define the application and accreditation procedures based on the technical parameters. In addition, for disbursement only enterprises will be eligible, which procure at least 30 percent of their raw materials or agricultural products from the 28 program counties. The DLI disbursements will be made against agreed sub-set of standards which will be subject to verifications.

193. The DLI would generate climate co-benefits by providing incentives, through the PRLE accreditation criteria, for integrating climate change preparedness and mitigation into enterprise operations, through PRLE scoring system. This includes scores for: (a) introduction of, and access to, climate-smart agriculture technologies by those farmers and farmer cooperatives supplying to the PRLE, which will enable adaptation and/or result in mitigation through adoption of actions such as water conservation, recirculation of resources, reduced use of chemical fertilizers and pesticides, investments which increase vegetative cover, and other sustainable agriculture/livestock practices and technologies in their operations; and (b) provision of adaptation- and mitigation- related (and other) technical advice to contracted farmer cooperatives supported under the second DLI.

194. Verification protocol. The Poverty Reduction Leading Enterprises (PRLEs) means enterprises duly established and operating under the laws of the Borrower that receive accreditation by, in accordance with the Borrower’s *Circular on Improving the Certification and Management System of Poverty Reduction Dragonhead Enterprises* (Document No. 62) dated January 2018, and the Accreditation and Management Work Plan (see Annex 1 for details). RPRO carries out and reports number of accreditations on an annual basis to independent third-party verification agency (VA) acceptable to the Bank. The data about accredited enterprises and their poverty reduction commitments will be recorded in a database what will be set up by the RPRO. The accredited PRLEs are expected to regularly up-date their information in the data base as part of the accreditation agreement. A third-party VA verifies all reported accreditations through enterprise visits, and stakeholder interviews. This verification will include key data, files and commitments provided by enterprises, and is based on the accreditation documentation. Verification that a DLI target has been achieved would be through a letter of confirmation to the Bank.

195. Disbursements are scalable and will be made against the number of accredited firms in given time period which meet the standards set in the Accreditation and Management Workplan, based on the agreed unit values. The verification would cover all accredited PRLEs to confirm the achievement or non-achievement of a DLI. The baseline value is zero and target value is 100 enterprises by 2020.

DLI 2: Number of Pro-poor Farmer Professional Cooperatives meeting the operational standards.

196. Rationale. Strengthening the role and capacity of farmer cooperatives is critical to achieve the objectives of poverty reduction through agricultural industrialization. The success of farmer professional cooperatives in generating economic benefits for their members in general and for their poor members in particular depends on their ability to meet key operational standards (e.g. accounts management and transparency, governance, etc.) and poverty alleviation commitment in terms of inclusiveness of poor households, and a fair shareholding and benefit distribution arrangements. Developing existing or new farmer cooperatives into *Pro-poor Farmer Professional Cooperatives*, which meet the standards and conditions needed to achieve the expected economic performance and poverty reduction impact, would create centers of excellence and demonstration models for other such cooperatives.

197. The operational standards, which in addition to improved governance and benefit sharing arrangements, encourage climate adaptation and mitigation activities. It is expected that about one-third of cooperatives supported under this PforR would be engaged in livestock production activities. Climate co-benefits would be generated through the related PAP action 7, which requires regional and county livestock bureaus to prepare prototype livestock manure management designs and provide training to livestock cooperatives supported under this PforR on specific livestock waste management techniques, which would reduce methane emissions, such as anaerobic digestion of the waste into bio-gas for larger farms and aerobic treatment of waste to produce compost (which produces only CO₂ rather than CH₄) for smaller farms. It is also expected that another one-third of cooperatives supported under the PforR would be engaged in planting tree crops in currently vacant slope land, which is expected to increase vegetative cover (fruit trees, bamboo, oil tea, etc.). Planting such tree crops is expected to contribute to mitigation of climate change through carbon sequestration.

198. Verification protocol. This DLI is defined as number of pro-poor farmers professional cooperatives, registered in the Industry and Commercial Bureau under the Cooperative Law, meeting defined operational standards, which means a set of standards related to a pro-poor farmer cooperatives' registration, membership, financial management, decision-making arrangements, acceptable to the Bank (see Annex 2). The pro-poor farmer professional cooperatives are duly established under the laws of China and the DOA, and at least 30 percent of its members are registered poor households or 40 percent of all registered poor households in each of the covered administrative villages are members of said cooperative.

199. The related PAP action is the preparation and installation of the computerized Management Information System (MIS) for farmer cooperatives to be prepared by the Regional Department of Agriculture. The operational standards include criteria which cover constitutional settings of farmer cooperatives, their financial management and transparency performance. The DLI verification of cooperatives which meet eligibility would be based a sub-set of criteria agreed with the Government, which are critical to ensure the performance and sustainability of cooperatives.

200. The Agricultural Bureaus or the Economic and Management Bureaus of agricultural departments at the county levels will record the cooperative information in the data base on a regular basis and take responsibility for the accuracy of the information. Cooperatives meeting all the agreed eligibility requirements will be reported to the World Bank for disbursement on an annual basis.

201. An independent third-party VA will conduct a random verification of 20 percent of all cooperatives from a given DLI disbursement period (annually) deemed to meet the agreed operational standards using a check list. Verification that a DLI target has been achieved would be through a letter of confirmation to the Bank.

202. Disbursements are scalable and will be made against the number of farmer cooperatives which meet the agreed standards based on the agreed unit values. The verification would cover a random sample of farmer cooperatives to confirm the achievement or non-achievement of a DLI. The verification will be done through random field survey by checking records and files of not less than 20 percent of the reported cooperatives and conducting interviews with a random set of at least 10 members of a cooperative, of which 5 should come from registered poor households. If 10 or less than 10 percent verified cooperative fails to meet agreed operational standards, the uncompliant cooperatives will be excluded from DLI disbursement calculations. If more than 10 percent of the verified cooperative fail to meet agreed operational standards the DLI for a given year is considered as “not achieved” and the entire set of cooperatives from this year will be subject to a new round of random verification in a following year, in addition to new random verification sample.

203. The DLI baseline for cooperatives which meet defined operational standards is zero and target is 500 cooperatives by 2020. These cooperatives are expected to primarily come from the existing 2,000 or so demonstration cooperatives, which have generally higher capacities, as well as from the remaining pool of registered cooperative sin the targeted 28 counties. The DLI targets could also include new farmer cooperatives which could be potentially established by targeted counties.

DLI3: Value of annual purchases of agricultural products by Poverty Reduction Leading Enterprises from farmers and farmer cooperatives.

204. Rationale. This DLI is expected to generate operational results from the enterprise accreditation process under DLI 1. Attracting suitable poverty reduction DHEs which are committed to working with poor famers and farmer cooperatives is an important condition in increasing the poverty reduction impacts of agricultural industrialization programs. It is expected that the combination of the PRLE Guidelines, which would enhance the poverty reduction impact of enterprise accreditation process and establishment of more poverty focused cooperatives, as defined under DLI 2, would provide confidence that a reasonable share of enterprise purchases would come from poor farmers.

205. Climate co-benefits under this DLI are generated through its linkage to first two DLIs, which incentivizes PRLEs to integrate climate smart agriculture and livestock production practices and technologies into their operations and those of farmers and farmers cooperatives with which they have agricultural produce purchase arrangements. Although not directly measured, it is indeed expected that a significantly larger share of produce purchased annually by the PRLEs from its farmers members and cooperatives would have been generated through the incorporation of climate resilient practices and technologies into their operations.

206. Verification Protocol: The DLI is defined as a value of annual purchases (in RMB) from farmers and farmer organizations by accredited PRLEs in the targeted 28 counties and includes unprocessed and processed products or agricultural raw materials. Annual purchases include all purchases valued at farm gate or cooperative gate prices from farmers and farmer organizations by accredited Poverty Reduction Leading Enterprises (PRLEs) from the 28 program counties starting from the date of accreditation (date of payment). It includes unprocessed and processed products and agricultural raw materials including intermediary products and agricultural inputs (e.g. feedstuff, fodder, organic fertilizer, biomass for energy generation or renewable energy generated from farm products or agricultural by-products). Purchases through collectors or middlemen can also be included provided that the sourcing of the products from the 28 program counties and the actual payments can be verified. Annual purchase does not include land rental or land lease payments, but includes profit distribution, dividend payments or other bonuses paid from the PRLEs to farmers/cooperatives based on volumes or values of products sold to the enterprises.

207. The RPRO will use the database, which will be set up for the computerized MIS for accredited PRLEs (PAP action) to record the eligible purchases from the program areas. Enterprises are required to report this information as part of the accreditation process. The RPRO would report the cumulative value of annual purchases (in RMB) by accredited poverty PDHEs from farmers and farmer cooperatives in 28 targeted counties to the World Bank for disbursement on an annual basis.

208. The independent VA will verify the data provided by the Regional PRO annually. Verification that a DLI target has been achieved would be through a letter of confirmation to the Bank. The verification will involve enterprise visits, files and accounts checking and farmer/cooperative interviews. Disbursements are scalable and will be made against the value of purchases based on the agreed unit values.

DLI4: Number of farmers completing the New Professional Farmer Development training program

209. Rationale. Improving the skills of the poor households through skills training programs is one of the more effective approaches for poverty reduction. Recently the skill training programs in Guangxi have shifted from providing training for off-farm employment to higher farming productivity which is related to declining surpluses of rural labor force who previously migrated to urban areas for employment. Guangxi has implemented the New Professional Farmers Development Program under the consolidated Poverty Reduction Program. The program has a good design, functions well, is closely related to Chanye Fupin activities and could make a significant contribution to poverty reduction by training poor households and by training non-poor households who would engage in the development of local industries, which could create economic opportunities for poor households. However, the current numbers of farmers participating in this program are rather low. In 2017 only 4,291 farmers participated in this training program in the targeted 28 counties. This reflects the relatively low allocations of CPRF for vocational training programs by county governments (about 0.1 percent in 2017), owing to the relative novelty of this program. The PforR aims to incentivize the county government to allocate more budget resources for New Professional Farmer Development Program in order to significantly scale up the program implementation and deepen the impact of the program on farmers' incomes. It is expected that as a result of greater CPRF allocations on this training program, the number of participating farmers is expected to double in 2018 and reach almost ten times increase by 2020 over 2017 levels, with expected cumulative number of farmers participating in the program about 40,000 under the PforR, compared to about 12,000 under without PforR scenario. This means that there will be cumulatively also more woman and registered poor households benefiting from this program as a result of the incentives provided by PforR.

210. Climate co-benefits would be generated through broadening the farmer skills training curricula to include technical training to disseminate knowledge about enhancing climate resilience of agricultural and livestock activities. Specifically, the PforR supports transfer of knowledge about climate smart agriculture and livestock practices and technologies, adaptation to weather-related natural disasters including flood and landslides; and prevention of pest and insect-related plant diseases that could result from climate variability.

211. Verification Protocol: The DLI is defined as number of farmers who complete the New Professional Farmer Development Program in 28 targeted project counties, where the New Professional Farmers Development Training Program” means the training program managed by Guangxi’s Regional Department of Agriculture, in accordance with the guidelines jointly issued by Guangxi’s Regional Department of Agriculture and Regional Department of Finance on August 24, 2017, and the training plan adopted by Guangxi’s Regional Department of Agriculture on April 24, 2018, and designed to scale up the program for skilling rural farmers on job opportunities creation and income generation.

212. The related Results Framework indicator will be the share of woman farmers and registered poor farmers from accurate poverty database who participate in the New Professional Farmer Development

Program in 28 targeted project counties. The former is expected to increase from 25 percent in 2017 to 30 percent in 2020 while the latter is expected to increase from 10 percent in 2017 to 18 percent in 2020. These target for registered poor households is reasonable given that the number of poor is expected to decline over the PforR period.

213. Disbursements are scalable and will be made against the number of farmers who participate in the New Professional Farmer Development Program. The data will be annually collected by the Guangxi DOA. Based on this data the Guangxi DOA compiles the annual report which will be confirmed by the third-party VA. Verification that a DLI target has been achieved would be through a letter of confirmation to the Bank.

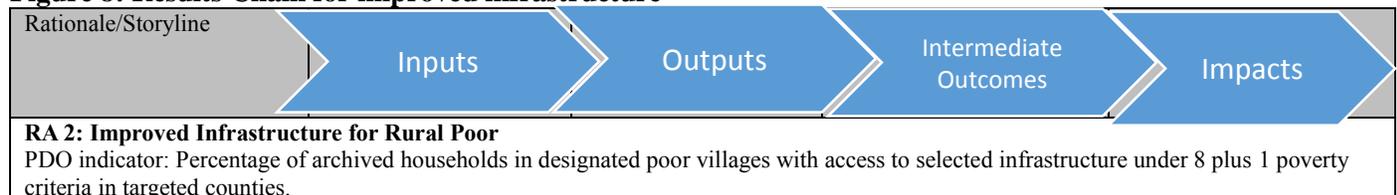
214. The verification review will be done against Program Guidelines approved by Guangxi Agriculture Department on August 24, 2017. It will require the review of relevant training documents from randomly selected 3 counties (10 percent of targeted poor counties) which will be repeated for each disbursement year for new set of counties. In each randomly selected county, the verification will then randomly select 20 percent farmers and of which 20 percent registered poor farmers who participated in the New Professional Farmer Development Program in given year. The survey will collect household information on the following variables: share of female and registered poor, training content, method and organization of training, process, result and usefulness of accreditation, satisfaction with the services provided (this will be tracked also as an indicator of citizen engagement), frequency and relevance of continuous support, management of the whole program. However, only the evidence on the confirmation of the person's completion of the New Professional Farmer Development Program in given year will be used to verify DLI disbursement values. The rest of the information collected from beneficiary surveys will be used for the purposes of tracking the implementation progress of the program, including the Results Framework indicators, which will be monitored through routine supervision missions.

Results Area 2 Improved Infrastructure for Rural Poor

215. Effective transitions out of poverty will depend on improving the quantity and quality of key basic infrastructure services, particularly for water and road connectivity. Access to electricity is almost universal, and investments are being made outside of the consolidated mechanism. Beyond needing to secure minimal “all weather” road access for a remaining number of natural villages, significant spending continues to be allocated to financing particularly the upgrading of roads, including for climate resilience. The counties are therefore focused on effectively utilizing the consolidated poverty funds to secure an improved road network in poor areas. Strengthening upstream project preparation and management is critical to ultimately delivering on priority projects. In the case of water, the challenge is in also securing this pipeline of projects, but moreover ensuring the quality of drinking water access. There is also a need to strengthening of standards and awareness by the county governments to effectively prioritize their infrastructure investment projects.

216. Figure 8 presents the Results Chain, includes two DLIs for this Result Area, designed to improve the delivery of the infrastructure services in the targeted poverty counties.

Figure 8: Results Chain for improved infrastructure



<p>Access to safe drinking water is an essential element for poverty alleviation as the safe drinking water is a basic need for quality of living and health of people</p>	<p>Improved standards and monitoring protocols for water quality</p> <p>Investment in water supply facilities</p> <p>Water quality monitoring and treatment</p>	<p>Appropriately constructed and maintained drinking water supply facilities</p>	<p>DLI 5: Number of Registered Poor Persons with New Piped Drinking Water Connections</p>	
<p>Improving road connectivity is the key for the poverty alleviation, through facilitating villagers with better access to markets, public services, and employment opportunities.</p> <p>The improvement of village connecting roads serve the whole poor village, and meet with the fundamental travel demand of the villagers, which makes it as the key indicator to reflect the contribution of rural infrastructure improvement to the poverty reduction.</p>	<p>Improved standards and monitoring protocols for rural roads' technical design</p> <p>Investment in rural roads</p> <p>Roads Maintenance</p>	<p>Well-serviced rural roads</p>	<p>In line with the national and provincial plans, the PforR will support poor villages in 28 poor counties of Guangxi to achieve 100 percent paved road connectivity by 2020.</p> <p>The road connectivity rate for large natural villages (≥ 20 hhs) in 28 counties. Each large natural village (≥ 20hhs) should have at least one cement/ gravel road connected by 2020.</p>	
<p>Improving and streamlining the infrastructure projects management is critical for ensuring the quality of projects, efficiency of project implementation and impact on poverty reduction</p>	<p>Software Development of Infrastructure Project Management System</p> <p>Preparation of Users' Manual and guidelines</p> <p>Trainings</p> <p>Pipeline project preparation (technical design, public consultation and feasibility study)</p>	<p>DLI 6: Number of Targeted counties with an IT-based Infrastructure Project Management System</p>	<p>More efficient process of infrastructure projects preparation</p> <p>Better quality projects being selected</p> <p>Better alignment of project composition with the program priority</p> <p>Accelerated project implementation</p>	

DLI 5: Number of Registered Poor Persons with New Piped Drinking Water Connections

217. Rationale. Access to drinking water is an essential element for poverty alleviation and it is also one of the eight indicators of lifting the rural people from poverty set forth by the Regional Government. The number of registered rural poor people being connected to piped drinking water systems is measurable and this data is available from the NRPS under the Regional PRO. In addition, the related Results Framework indicators will track the satisfaction of these connected people with drinking water services provided (as citizen engagement indicator).

218. There are three steps to ensure the water quality control of the rural drinking water, i.e. at selection of source water, proper design for treatment, and during the operation. Water quality test is carried out by

the certified water test stations under the county water bureaus of the center of Disease Control (CDC) against the national standards, which are compatible with the WHO standards. The rural drinking water quality assurance practices carried out by the CDC are deemed adequate and there is therefore no need to add additional quality dimension to the DLI, relying thus on country systems. This DLI is related to the PAP action (preparing a practical primer as the technical reference on engineering design for rural water supply), which seeks to improve the quality of the technical design and O&M practices of rural water supply programs, including funding arrangements.

219. The PforR would enable targeted poor households to adapt to the increasing climate risk through expanding availability and safety of drinking water in response to potential water scarcity resulting from climate variability induced drought. It would also improve water conservation through enhancing operational and distributional efficiency of these water supply systems, which is addressed by the associated PAP action. It would also obviate the need to take conflicting allocative decisions on use of water (between agriculture and drinking purposes) which could either decimate crop production volumes or require reduction in drinking water.

220. Verification Protocol. The DLI is defined as number of registered rural poor people with new connection to piped drinking water systems, where the “new piped drinking water systems” are defined as: (a) new (or rehabilitated) connections to drinking water supply schemes that supply water to rural households from a single water source to water stands within less than 800 m from the respective rural household; or (b) new (or rehabilitated) connections to drinking water through distribution pipelines in rural residential areas (or natural villages of at least 20 people).

221. Whence any new piped water supply schemes under the PforR has been completed, i.e. the final inspection and acceptance certificate, has been issued, the data about the number of rural poor with new connection to piped drinking water systems will be collected by the local PROS’ staff during the final inspection of each water supply facility, including tap water supply (connected to households), and reported to the Regional PRO on annual basis. The number of registered rural people connected to new piped water supply schemes shall be recorded separately under two categories: (i) piped drinking water supply (water stands to rural communes (tun) and (ii) tap water supply as related Results Framework indicator.

222. Disbursements are scalable and will be made against the number of registered rural poor (measured in thousands) whom are newly connected to piped water schemes in each disbursement year, based on the DLI definition above, and agreed unit values. The DLI targets will be verified by the qualified third-party VA. Verification that a DLI target has been achieved would be through a letter of confirmation to the Bank.

223. Verification process will randomly select 3 counties (10 percent of targeted poor counties) which will be repeated for new counties in each disbursement year (2018, 2019, and 2020). In each randomly selected county, the verification will then randomly select 20 percent schemes built in each year or at least 3 schemes per county whatever number is larger. Within every scheme, the verification will review the connectivity of registered rural poor who were newly connected to the piped water supply. If less than 10 percent of the schemes fails to provide water to households, such schemes and associated registered poor households will be excluded from DLI disbursement calculations. If more than 10 percent of the verified schemes fail to provide water to households the DLI for a given year is considered as “not achieved” and the entire set of schemes from this year will be subject to a new round of random verification in a following year, in addition to new random verification sample.

224. The VA is expected to collect additional information that all necessary domestic procedures having been observed or followed (i.e. reviewing and confirming all relevant documents of each verified piped water supply schemes, including feasibility study report, design report, and final inspection/acceptance certificate) and report this information in the DLI verification report. Any shortcomings in these

documentations will be addressed through Bank supervisory process, but it will not form basis for DLI disbursements.

DLI 6: Number of Targeted counties with an IT-based Infrastructure Project Management System

225. Rationale. Infrastructure projects have significant role in achieving Guangxi 13th 5YP poverty reduction plan. Guangxi Government has requested all poor counties to step up their efforts in projects preparation and record all project in a database. And only the projects identified in the database will be eligible for budget allocation from CPRF and receiving authorization for implementation. The quality of the pipeline projects being selected in this database and timely monitoring their readiness for implementation is of great significance for the smooth project implementation and poverty reduction impact of the PforR. The technical assessment confirmed that currently most counties maintain manual worksheets for planning and tracking their infrastructure projects preparation and implementation. And the information about the infrastructure projects are managed by a variety of divisions, and information fragmentation prevents the county governments to efficiently manage the process of project planning, preparation and prioritization, or monitor the progress of project preparation. Development an integrated IT-based infrastructure project management system and adoption of this system at the county governments will help standardize project preparation process, maintain dynamic database, and generate integrated report about the infrastructure projects portfolio.

226. In addition, this system will also enhance project quality control by integrating all the necessary procedures (i.e. initial proposal applications, justifications, environment and social assessment requirements, feasibility and design studies, implementation plans). By processing all these functions with automated on-line database allows to standardize and strengthen the control procedures and gives the regional government's access to real-time monitoring of infrastructure investments through consolidation of the county databases. The project management system thus leads to improved efficiency in the preparation of AFUP of CPRF and accelerated implementation.

227. In terms of the system design, this IT-based Infrastructure management system shall integrate the modules of project proposal, projects selection, review and approval, authorization, public disclosure, documentation filing, reporting, etc. The project classification shall be revised in alignment with the new expenditure classification to be adopted in the AFUP.

228. Verification Protocol. The DLI is defined as number of counties that adopt an IT-based infrastructure projects management system. Guangxi PRO will take major responsibility of the system development. The TOR of this system shall be agreed with the Bank. Guangxi PRO will issue the software, users' manual and guideline to the county governments. Targeted counties shall install and use this system for the infrastructure projects management. Guangxi PRO will recruit a third-party agency to verify the installation of this system in targeted counties through on-site review. The evidence of successful installation is that the county can maintain the full project database in the system and generate aggregated report according to the province guideline. The baseline at the end of 2017 is zero and the end target at end of 2020 is 28. Ten percent of the IBRD loan, or US\$39.9 million, will be assigned to this DLI. The DLI disbursements (scalable) will be made annually against reached targets. The estimated targets in 2018 and 2019 are 10 and 18 counties.

Results Area 3 Cross-cutting Issues for Enhanced Program Implementation

229. Timely and effective resource prioritization will be critical to meeting 2020 poverty targets. With the consolidation of funds reform, effective resource allocation and implementation hinges largely on the counties, as reflected in their annual budget prioritization processes. As per local poverty conditions, counties will need to effectively prioritize across different sub-sectors and programs. Lack of timely

prioritization and budget allocation would lead to lags in budget execution. Timely information will also be vital for seeing whether key targets prioritized in this program are being met, or require measures to improve the quantity or quality of spending.

Figure 9: Cross-cutting Issues for Enhanced Program Implementation

Rationale/Storyline	Inputs	Outputs	Intermediate Outcomes	Impacts
RA 3: Cross-cutting Issues for Enhanced Program Implementation				
PDO indicator: Integrated Consolidated Fund Program-based Performance Monitoring Report				
The CPRP scheme requires reform in budget management and reporting to enable tracking expenditures in subprograms and activities, and thus improving the accountability over performance of CPRP	Software development of computerized funds pooling, budget reporting and data transmission Preparation of guidelines Trainings Financial rewards to incentive counties	DLI 7: Number of Targeted counties with Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports	Efficient budget management of CPRP Improved M&E and accountability over performance of CPRP	
Evidence based policy is critical to achieving poverty eradication targets. Multi-dimensional definition of poverty (8+1 “haves”) requires intersection from NPRS database with other key data from different service providers. Particularly because there is no single database that collects all the necessary information (e.g. budgets, expenditures, beneficiaries, goods and services provided, location characteristics) and because there are several agencies with their own databases and systems, that intervene in funding and implanting the poverty strategy	Software development Preparation of Users’ Manual and guideline Trainings Data inputs, transmission and analysis	DLI 8: Poverty data platform for monitoring and evaluation of poverty reduction	Improved M&E and accountability	

DLI 7: Number of targeted counties with Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports

230. Rationale. A robust annual fund use plan and implementation report of CPRF provides good orientation, accountability and transparency of county governments for achieving the poverty reduction goals. Poverty counties in Guangxi have established a fund consolidation office to coordinate the allocation of CPRF, and generally have a rigorous budget plan and execution system. All these provide solid foundation for the preparation of annual fund use plan and implementation report of CPRF. Under the support of this PforR, Guangxi DOF is taking further measures to improve the annual budgeting process

with an aim to enable county governments to better deploy DPRF to the local priorities and enhance their capacity in budget execution. Guangxi DOF will update its regional guideline for the preparation of AFUP and implementation report of CPRF. One major improvement is to introduce a new template of AFUP and implementation report which applies a new program-based expenditure classification system. With this new template, the county governments can easily monitor the implementation progress of each sub-programs, analyze the impact of the sub-programs against their financial inputs and make an informed decision of program prioritization, while still complying to the reporting requirements of the central MOF²⁹.

231. Poverty counties' adoption of Guangxi DOF's new guidelines and preparation of AFUP and implementation report in the agreed template will be the result of the improved annual budget system and process of CPRF. Successful adoption requires reform of expenditure classification at regional level, pool of CPRF at county level, and development and application of automatic expenditure tracking and reporting system. Selection of the number of counties which produce AFUP and implementation report of CPRF in an agreed template as one DLI will provide additional financial incentive to the province and county governments to endorse and pursue this change. In addition to the benefits mentioned above, the successful adoption can also lead to improved reliability of monthly financial reports, provides better audit trail, which increases the likelihood of a "clean" PforR financial statement audit opinion. Additionally, this also enhances province DOF's capacity in monitoring and evaluating counties' budget adequacy, implementation progress and performance of CPRP.

232. Verification protocol. The DLI is defined as number of targeted counties that produce AFUP and implementation report of CPRF in the specified template. *The* AFUP means each of the rolling plans setting forth the values of budgets, planned sources of funds, planned expenditures of sub-programs for the CPRF for the fiscal year of Guangxi to be prepared or updated by each of the Targeted Counties on an annual basis. Annual program-based expenditure reports mean each of the reports setting forth values of budgets, overall fund utilization, actual expenditures of sub-programs incurred and payment progress thereof, if any, per sub-programs for the CPRF, and summarizing budget allocations, expenditures type and utilization of the CPRF, covering the period from the beginning of each fiscal year of Guangxi, to be prepared or updated by each of the targeted counties on an annual basis.

233. The template for AFUP and implementation report that adopts program-based expenditure classification has been agreed with the Bank and has been specified in the regional government's guidelines. Targeted counties shall then prepare AFUP and implementation report using this agreed template. The baseline at the end of 2017 is zero and the end target at end of 2020 is that all 28 targeted counties produce the AFUP and implementation report in this agreed template. Guangxi Audit Office will carry out the verification during annual financial audit process through reviewing the counties' AFUP and implementation report against the template specified in the regional government's guideline.

DLI 8: Poverty data platform for monitoring and evaluation of poverty reduction.

234. Rationale. The Guangxi Autonomous Region "Tackling Poverty" 13th five-year plan has, among its multiple directives, the purpose to improve poverty reduction systems and planning through data platforms that allow for more accurate poverty reduction programs (chapter 13, section V of the cited document). Beyond accuracy, increase efficiency in poverty programs management is needed, because even faster rate of poverty reduction will be needed in coming years to achieve 2020 poverty reduction targets,

²⁹ Technical assessment determined that Du'an county has already established an automated data consolidation system, which could serve as a good practice for other targeted counties to address the current issue of inefficiency of manual reporting.

so more efficiency in the allocation of funds will be needed for accurate poverty reduction. The poverty data platform is precisely aimed to support this objective.

235. The multi-dimensional definition of poverty reduction efforts in Guangxi Autonomous Region (e.g., 8 plus 1 "haves") requires the combination of multiple data sources from different service providers. Particularly because there is no single database that collects all the necessary information (e.g. budgets, expenditures, beneficiaries, goods and services provided, location characteristics) and because there are several agencies with their own databases and systems, that intervene in funding and implementing the whole poverty reduction strategy. An aspect of the M&E system would be collection of data and information, and monitoring performance of the PRLEs and professional farmers cooperatives, the New Professional Farmer Development training program, and the drinking water component on adaptation and mitigation actions taken.

236. Verification Protocol. The poverty data platform will be developed and curated at the Information Technology office of the Guangxi Poverty Reduction Office as per agreed quality standards, which mean a set of technical standards related to data preservation, integration, and accessibility, acceptable to the Bank. The DLI disbursement will be made in one tranche upon completion of the following agreed actions: (i) data platform is available and operative for use by authorized staff; and (ii) the data platform includes additional databases to enhance the monitoring and evaluation capabilities of the users, and (iii) the data portal complies with best practices in terms of data preservation. Target date for the completion of this DLI is September 2019.

237. The validation protocol consists in third party verification of the agreed quality standards and criteria, which cover: (i) accessibility (i.e., the data platform is available and operative for use by authorized staff); (ii) integration (i.e., the data platform includes four additional databases as specified above); and (iii) preservation (i.e., data platform complies with agreed standards in terms of data preservation). The verification agency should confirm that the data portal complies with seven criteria to guarantee basic levels of accessibility, integration and preservation.

238. Regarding accessibility, microdata and descriptive statistics in the data portal should be available to selected staff for monitoring and evaluation purposes. Selected authorized staff at two levels of government (e.g., all 28 poverty-stricken counties and all regional line departments involved in poverty alleviation activities) have access to the portal and can download selected summary statistics or microdata from surveys or administrative data included in the portal. The access can be through a security code or other mechanisms, and the type of data that can be accessed from the portal may vary according to authorization levels and staff responsibilities in monitoring and evaluation of poverty programs. Authorized staff should be notified and trained about how to access and make use of the data portal.

239. Regarding integration, the data portal should attain two goals: first, it includes databases and/or administrative records related to activities included in this PforR operation; and, second, these new sources of data are integrated to other databases in the portal. The former refers to uploading into the data portal microdata (and/or administrative records) from (i) computerized data base of Poverty Leading Enterprises as described in DLI 1, (ii) data base of Pro-poor Farmer Professional Cooperatives as described in DLI 2, (iii) data base of New Professional Farmers Program from DLI 4; and (iv) information on budget and program-based expenditure data by county as per new expenditure categories template for AFUP and implementation reports from DLI 7. The latter involves that cross tabulations and summary statistics with other data sources included in the portal, particularly with the National Poverty Registration System, are feasible. Variables related to village or county name, or even household members name, can be used to link different databases.

240. Regarding preservation, the data portal should include four components. First, there is an official entity, with regular annual budget and permanent staff, which is officially in charge of preserving and managing the data portal. Second, there are mechanisms to detect and prevent unintentional changes in data. Third, there is a record of all information in the portal (captured as metadata) that traces the origin and changes of all content of the portal since its creation. Fourth, copies of datasets are stored using simple encoding standards, in order to avoid losses of data (or lack of access) due to limits to use due to proprietary rights or program obsolescence. In addition, there should exist multiple copies of data as mechanisms of storage to guarantee data preservation in the event of obsolescence or physical damage.

241. The verification agency should confirm each of the above seven components and substantiate how these components are implemented in the data portal. In this regard, the verification agency should corroborate that the Guangxi Poverty Reduction Data Portal complies with international (e.g., Open Archival Information System, OAIS) or Chinese-equivalent best practices along the seven components described above.

242. The following tables summarize the information provided in the section, and provides additional information about, scalability and value of the DLIs.

Table 12: Results Framework Matrix³⁰

Results Areas Supported under PforR	PDO/Outcome Indicators (Key indicators to measure the achievement of each aspect of the PDO statement)	Intermediate Results Indicators (Critical processes, outputs or intermediate outcomes indicators needed to achieve each aspect of the PDO)	DLI #	Unit of Measurement	Baseline (Year)	End Target (2020)
Results Area 1 Improved Income Generation of the Poor	PDO Indicator 1: Production income of registered poor households in targeted counties		-	RMB	11,041 (2017)	15,000
	-	Number of enterprises accredited as Poverty Reduction Leading Enterprises	1	Number	0 (2017)	100
	--	Number of targeted counties with newly accredited poverty countries with poverty reduction leading enterprises	-	Number	0 (2017)	28
	-	Number of Pro-poor Farmer Professional Cooperatives meeting the operational standards	2	Number	0 (2017)	500
		Farmers reached with agricultural assets and services (who are benefitting from cooperative and enterprise activities)	-	Number	0 (2017)	100,000
		Pro-poor Farmer Professional Cooperatives membership: - % registered poor - % female	-	Percentage Percentage	N/A	30 30
	-	Value of annual purchases of agricultural products by poverty reduction leading enterprises from farmers and farm cooperatives	3	RMB	0 (2017)	RMB 2 billion
		Number of farmers completing the New Professional Farmer Development training program - % of female - % of registered poor	4 - -	Number Percentage Percentage	4,291 25 10 (all 2017)	40,000 30 18
	CE indicator, data will be collected as part of verification=>	Customers satisfied with the services provided by the New Professional Farmer Development training program	-	Percentage	0	70%

³⁰ The geographic coverage of scalable indicators is 28 targeted poverty counties in Guangxi.

Results Areas Supported under PforR	PDO/Outcome Indicators (Key indicators to measure the achievement of each aspect of the PDO statement)	Intermediate Results Indicators (Critical processes, outputs or intermediate outcomes indicators needed to achieve each aspect of the PDO)	DLI #	Unit of Measurement	Baseline (Year)	End Target (2020)
Results Area 2 Improved Infrastructure for Rural Poor	PDO Indicator 2: Percentage of registered households with access to selected infrastructure assets according to 8+1 poverty criteria in targeted counties: 2.1: Rural roads 2.2: Safe drinking water		-	Percentage	96 78.6 (2017)	98% 85.4%
	-	Number of Registered Poor Persons with New Piped Drinking Water Connections	5	Number	95,400 (2017)	210,000
	-	Customers satisfied with the drinking water supply services	-	Percentage	0	70%
	-	Number of targeted counties with an IT-based Infrastructure Project Management System	6	Number	0 (2017)	28
	-	Paved road connectivity rate in large (=> 20 hhs) natural villages	-	Percentage	81.3 (2018)	85
Results Area 3 Cross-cutting Issues for Enhanced Program Implementation	PDO Indicator 3: Integrated Consolidated Fund Program-based Performance Monitoring Report		-	Number of annual reports	0 (2017)	3
	-	Number of targeted counties Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports	7	Number	0 (2017)	28
	-	Unified poverty data platform established and fully operational	8.1	Number	0 (2017)	1
	-	Number of additional datasets integrated from key institutional entities into Big Data platform	8.2	Number	0 (2017)	4

Table 13: Indicator Description

Indicator Name (#)	Description (Clear definition and so on)	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	DLIs	
						Responsibility for Data Verification	Scalability of Disbursement (Yes/No)
Production income of registered poor households in targeted counties	The indicator is measured for those registered households whose agriculture production income is equal or more than 50 percent from total household net income. It represents the proxy for those rural poor who are most likely to engage in agricultural industrialization activities	Annual	Regional poverty registry (NPRS) database of registered households.	Aggregated data for 28 counties from the NPRS.	Data exists and is available to the RPRO	-	-
Number of enterprises accredited as poverty reduction leading enterprises	Poverty reduction leading enterprises are defined by meeting the specified criteria and following successful accreditation by Regional [or Municipality] Poverty Reduction Offices	Annual	Computerized data base maintained by Regional PRO	Reporting by Regional PRO	Regional PRO	An independent third-party agency	Yes
Number of targeted counties with newly accredited poverty reduction leading enterprises	This indicator measures the distribution of accredited poverty reduction leading enterprises in the targeted counties. The purpose is to avoid concentration of such	Annual	Computerized data base maintained by Regional PRO	Reporting by Regional PRO	Regional PRO	-	-

Indicator Name (#)	Description (Clear definition and so on)	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	DLIs	
						Responsibility for Data Verification	Scalability of Disbursement (Yes/No)
	enterprises in few counties.						
Number of Pro-poor Farmers Professional Cooperatives meeting the operational standards	The operational standards are specified in related PAP action	Annual	Computerized data base maintained by Regional DoA	Field evaluation by county agriculture department staff.	County and Regional DoA	An independent third-party agency	Yes
Farmers reached with agricultural assets and services (who are benefitting from cooperative and enterprise activities)	This is core indicator and it will be measured as aggregate number of farmers who are members of farmer cooperatives registered under DLI 2 and who sell their produce to PRLEs under DLI 3.	Annual	Computerized data base maintained by Regional DOA and RPRO	Field evaluation by county agriculture department staff	County and Regional DOA, RPRO	-	-
Pro-poor Farmers Professional Cooperatives membership: - % registered poor - % female	Related to the previous indicator, but with focus only on members of farmer cooperatives broken down by gender and registered poor.	Annual	Computerized data base maintained by Regional DOA	Field evaluation by county agriculture department staff and independent third-party agency	County and Regional DOA and independent third-party agency	-	-
Value of annual purchases of agricultural products by poverty reduction leading enterprises from farmers and farm cooperatives	Includes all purchase from farmers and farmer organizations by accredited DHEs in the program areas and includes unprocessed and processed products	Annual	Computerized data base maintained by Regional PRO	Recorded by DHEs	DHEs and Regional PRO	An independent third-party agency	Yes

Indicator Name (#)	Description (Clear definition and so on)	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	DLIs	
						Responsibility for Data Verification	Scalability of Disbursement (Yes/No)
	or agricultural raw materials.						
Number of farmers completing the New Professional Farmer Development training program - % of female - % of registered poor	Number of farmers in targeted counties completing the New Professional Farmer Development training program broken down by gender and registered poor	Annual	Administrative records of Guangxi DOA	Guangxi DOA aggregate the data from targeted counties. Additional data/information will be provided by VA.	Guangxi DOA and their offices in 28 targeted counties.	Third party VA will review the training records and conduct interviews with program beneficiaries in randomly selected counties.	Yes
Customers satisfied with the services provided by the New Professional Farmers Development training program	This is citizen engagement indicator which measures satisfaction rate of participating farmers with the skills training services provided by training institutes	Annual	Beneficiary surveys	The data will be collected as part of DLI verification process by VA from the sample of beneficiary interviews	VA agency to provide this data to Guangxi DOA	-	-
Percentage of registered households with access to selected infrastructure assets according to 8+1 poverty criteria in targeted counties: - Rural roads - Safe drinking water	Measures number of registered poor households with access to rural infrastructure (Rural roads and safe drinking water) over total population which has access to these infrastructure	Annual	Administrative records from Water Bureau and PRO. Data on registered households from NPRS database	NPRS data for Guangxi administered by RPRO. The RPRO will aggregate the data from poor villages with road, water supply and sanitation infrastructure investments and	Regional PRO with inputs from Transport and Water Bureaus	-	-

Indicator Name (#)	Description (Clear definition and so on)	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	DLIs	
						Responsibility for Data Verification	Scalability of Disbursement (Yes/No)
				estimates then the number of people			
Number of registered poor people with new piped drinking water connections	Measures incremental number of registered poor in designated villages who will be connected to piped water supply systems during 2018-2020 period. Access to drinking water is defined by access to piped water supply.	Annual	Administrative records from Water Bureau. Data on registered households comes from NPRS database	Guangxi PRO aggregate the data from 28 targeted counties on registered poor households with piped drinking water systems	Guangxi Water Bureau and Poverty Reduction Office	Third party verification agency	Yes
Customers satisfied with the drinking water supply services	This is citizen engagement indicator which measures satisfaction rate of registered poor households with the drinking water supply services provided by the government	Annual	Beneficiary surveys	The data will be collected as part of DLI verification process by VA from the sample of beneficiary interviews	VA agency to provide this data to Guanxi PRO		-
Number of targeted counties with an IT-based Infrastructure Project Management System	A IT- based infrastructure project management system to be developed by Guangxi Poverty Reduction Office and properly adopted by all project counties	Annual	System maintained by Guangxi Poverty Reduction Office	Reports generated from the system	Poverty Reduction Office of program counties and Guangxi	Third party verification agency	Yes

Indicator Name (#)	Description (Clear definition and so on)	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	DLIs	
						Responsibility for Data Verification	Scalability of Disbursement (Yes/No)
Paved road connectivity rate in large (=> 20 hhs) natural villages	Measures improved accessibility through road connectivity in large (=> 20 hhs) natural villages. Roads connectivity rate = (Number of poor villages owning paved village connecting road / total number of poor villages in 28 targeted counties) x 100%	Annual	Administrative records and Guangxi poverty registry database	Guangxi PRO to aggregate the data from 28 targeted counties on designated natural poor villages with access to roads	Guangxi Poverty Reduction Office	-	-
Integrated Consolidated Fund Program-based Performance Monitoring Report	Guangxi DOF will prepare annual program-based performance monitoring report which integrates financial and non-financial performance information of all sub-programs of CPRF in 28 targeted counties.	Annual	Reports prepared by RDOF with inputs from line agencies and 28 targeted counties	Reports	Guangxi DOF, line departments and 28 targeted counties	-	-
Number of targeted counties Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports	Guangxi DOF will issue a new guideline specifying a reporting template with new expenditure classification in alignment with Guangxi major poverty reduction subprograms.	Annual	Individual reports prepared by project counties and consolidate reports maintained	Reports	Finance Bureau of program counties and Guangxi DOF	Guangxi Audit Office	Yes

Indicator Name (#)	Description (Clear definition and so on)	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	DLIs	
						Responsibility for Data Verification	Scalability of Disbursement (Yes/No)
			by Guangxi DOF				
Unified poverty data platform established and fully operational including four additional datasets integrated from key activities related to this PforR	The Guangxi PRO Data Platform is accessible to authorized staff for routine data access and analysis. The authorized staff can draw data from Data Platform related to poverty alleviation programs in Guangxi	September 2019	Poverty Reduction Office of project county and Guangxi	Report produced by third-party verification entity	Poverty Reduction Office of project county and Guangxi	Third party verification agency	No

Table 14: Disbursement Linked Indicators Matrix

	Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (US\$, millions)	As % of Total Financing Amount	DLI Baseline	Indicative timeline for DLI achievement		
							Year 1	Year 2	Year 3
DLI 1: Number of enterprises accredited as Poverty Reduction Leading Enterprises		Yes	Number of poverty reduction leading enterprises accredited.	-	-	0	20 enterprises meeting the agreed criteria	40 enterprises meeting the agreed criteria	40 enterprises meeting the agreed criteria
Allocated amount:				\$100 mill			\$20 mill	\$40 mill	\$40 mill
Formula:	\$1,000,000 per each enterprise accredited as Poverty Reduction Leading Enterprise								
DLI 2: Number of Pro-poor Farmer Professional Cooperatives meeting the Operational Standards		Yes	Number of cooperatives meeting the agreed criteria	-	-	0	100	300	100
Allocated amount:				\$80 mill			\$16 mill	\$48 mill	\$16 mill
Formula:	\$160,000 per each Pro-poor Farmer Cooperative meeting the Operational Standards								
DLI 3: Value of annual purchases of agricultural products by poverty reduction leading enterprises from farmers and farmer cooperatives		Yes	RMB value of annual purchases by accredited poverty reduction leading enterprises	-	-	0	RMB 100 mill	RMB 600 mill	RMB 2,000 mill
Allocated amount:				\$40 mill			\$2 mill.	\$12 mill.	\$40 mill.
Formula:	US\$ 20,000 per each RMB one million of purchased products from farmers and farmer cooperatives in the program counties by accredited leading enterprises								
DLI 4: Number of farmers completing the New Professional		Yes	Number of farmers who have completed	-	-	4,291 farmers			

	Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (US\$, millions)	As % of Total Financing Amount	DLI Baseline	Indicative timeline for DLI achievement		
							Year 1	Year 2	Year 3
Farmer Development training program			the training program annually			(2017)	8,200 farmers	11,000 farmers	20,800 farmers
Allocated amount:				\$40 mill			\$8.2 mill	\$11 mill	\$20.8 mill
Formula:	\$1,000 per each farmer completing the New Professional Farmer Development Training Program								
DLI 5: Number of Registered Poor Persons with New Piped Drinking Water Connections		Yes	Number of Registered Poor Persons with New Piped Drinking Water Connection	-	-		80,000	70,000	60,000
Allocated amount:				\$42 mill			\$16 mill	\$14 mill	\$12 mill
	\$200 per each Registered Poor People with a New Piped Drinking Water Connection								
DLI 6: Number of targeted counties with an IT-based Infrastructure Project Management System		Yes	Number of counties	-	-	0	10 counties	18 counties	
Allocated amount:				\$39.9 mill			\$14.25 mill	\$25.65	
Formula:	\$1,425,000 per each Targeted County with an IT-based infrastructure project management system								
DLI 7: Number of targeted counties with Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports.		Yes	Number of counties	-	-	0	28 counties	28 counties	28 counties
Allocated amount:				\$40.6 mill			\$14 mill	\$14 mill	\$12.6 mill
Formula:	\$500,000 per each targeted county with Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports in Year 1 Year 2: \$500,000 per each targeted county with Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports in Year 2								

	Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (US\$, millions)	As % of Total Financing Amount	DLI Baseline	Indicative timeline for DLI achievement		
							Year 1	Year 2	Year 3
Year 3: \$450,000 per each targeted county with Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports in Year 3									
DLI 8: Poverty data platform for monitoring and evaluation of poverty reduction.		No	Functionality and content of Database	-	-	No Data Platform	Data Platform operational	Data platform adds at least 4 agreed databases	-
Allocated amount:				\$14.3 mill				\$14.3 mill	
Formula:	N/A								

Table 15: DLI Verification Protocol Table

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/ agency	Verification Entity	Procedure
1	Number of enterprises accredited as Poverty Reduction Leading Enterprises	Number of leading enterprises accredited as ‘poverty reduction leading enterprises’ by the Guangxi Regional or PRO. PRO carries out and reports a number of accreditations on an annual basis. The data about accredited enterprises and their poverty reduction commitments will be recorded in a database managed by RPMO.	Computerized data base/ RPRO	Third party verification agency	RPRO carries out and reports number of accreditations on an annual basis to independent third-party verification agency acceptable to the Bank. The data about accredited enterprises and their poverty reduction commitments will be recorded in a database what will be set up by the RPRO. The accredited PRLs are expected to regularly up-date their information in the data base as part of the accreditation agreement. A third-party VA verifies all reported accreditations through enterprise visits, and stakeholder interviews. This verification will include key data, files and commitments provided by enterprises, and is based on the accreditation documentation. Disbursements are scalable and will be made against the number of accredited firms in given time-period which meet the standards set in the Accreditation and Management Workplan, based on the agreed unit values. The verification would cover all accredited PRLs to confirm the achievement or non-achievement of a DLI.
2	Number of Pro-poor Farmer Professional Cooperatives meeting the operational standards	This DLI is defined as number of <i>demonstration professional farmer cooperatives</i> , which are pro-poor as defined as "at least thirty percent (30%) of its members are Registered Poor Households or forty percent (40%) of all Registered Poor Households in each of the covered administrative villages are members of said cooperative" registered in the Industry and Commercial Bureau under the Cooperative	Computerized data base/ Regional DoA	Third party verification agency	The Agricultural Bureaus or the Economic and Management Bureaus of agricultural departments at the county levels will record the cooperative information in the data base on a regular basis and take responsibility for the accuracy of the information. Cooperatives meeting all the agreed eligibility requirements will be reported to the World Bank for disbursement on an annual basis. The verification will be done through random field survey by checking records and files of not less than 20 percent of the reported cooperatives and conducting interviews with a random set of at least 10 members of a cooperative, of which 5 should come from registered poor households. If 10 or less than 10 percent verified cooperative fails to meet agreed operational standards, the uncompliant cooperatives will be excluded from DLI disbursement calculations. If more than 10 percent of the verified cooperative fail to meet agreed operational standards the DLI for a given year is considered as “not achieved” and a

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/ agency	Verification Entity	Procedure
		Law, meeting defined operational standards. The relevant cooperative data and operational parameters will be recorded in a database to be set up by the Regional Department of Agriculture.			new random verification sample of cooperatives will be selected for the next year.
3	Value of annual purchases of agricultural products by poverty reduction leading enterprises from farmers and farmer cooperatives	The DLI is defined as a value of annual purchases (in RMB) by accredited PRLEs from farmers and farmer cooperatives in 28 targeted counties.	Computerized data base/ RPRO	Third party verification agency	The independent VA will verify the data provided by the Regional PRO annually. The verification will involve enterprise visits, files and accounts checking and farmer/cooperative interviews. Disbursements are scalable and will be made against the value of purchases based on the agreed unit values.
4	Number of farmers completing the New Professional Farmer Development training program	The DLI is defined as number of farmers who complete the New Professional Farmer Development Program in 28 targeted project counties.	Administrative records of Guangxi DOA	Third party verification agency	Disbursements are scalable and will be made against the number of farmers who participate in the New Professional Farmers Development Program. The data will be annually collected by the Guangxi Agriculture Department, which will be confirmed by the VA. The verification will be done against Program Guideline approved by Guangxi Agriculture Department on August 24, 2017. It will include the review of relevant training documents in randomly selected 3 counties (10 percent of targeted poor counties) which will be repeated for each disbursement year for new set of counties. In each county the verification will then randomly select 20 percent farmers and of which 20 percent are registered poor farmers who participated in the New Professional Farmers Development Program in a given year.
5	Number of Registered Poor Persons with New Piped Drinking Water Connections	The DLI is defined as: (a) new (or rehabilitated) connections to drinking water supply schemes that supply water to rural households from a single water source to water	Administrative records and Guangxi poverty registry database / Regional	Third party verification agency	Verification process will randomly select 3 counties (10 percent of targeted poor counties) which will be repeated for new counties in each disbursement year (2018, 2019, and 2020). In each randomly selected county, the verification will then randomly select 20 percent schemes built in each year or at least 3 schemes per county whatever number is larger. Within every scheme, the

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/ agency	Verification Entity	Procedure
		stands within less than 800 m from the respective rural household; or (b) new (or rehabilitated) connections to drinking water through distribution pipelines in rural residential areas (or natural villages of at least 20 households).	Water Bureau and RPRO		verification will review the connectivity of registered rural poor who were newly connected to the piped water supply. If less than 10 percent of the schemes fails to provide water to households, such schemes and associated registered poor households will be excluded from DLI disbursement calculations. If more than 10 percent of the verified schemes fail to provide water to households the DLI for a given year is considered as “not achieved” and a new random verification sample will be selected for next year.
6	Number of targeted counties with an IT-based Infrastructure Project Management System	The DLI is defined as number of counties that adopt an IT-based infrastructure projects management system. Guangxi PRO will take major responsibility of the system development. The TOR of this system shall be agreed with the Bank. Guangxi PRO will issue the software, users’ manual and guideline to the county governments. Program counties shall install and use this system for the infrastructure projects management.	System maintained by Guangxi Poverty Reduction Office	Third party verification agency	Third-party VA will verify the installation of this system in targeted counties through on-site review. The evidence of successful installation is that the county can maintain the full project database in the system and generate aggregated report according to the province guideline. The baseline at the end of 2017 is zero and the estimated targets in 2018 and 2019 are 10 and 18 counties.
7	Number of targeted counties with Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports.	The DLI is defined as number of program counties that produce program-based budgeting plans and Annual Program-based Expenditure Reports. The plans and reports that adopts program-based	Individual reports prepared by project counties and consolidate reports maintained by Regional FB	Guangxi Audit Office	Program counties shall prepare Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports using the agreed template. The baseline at the end of 2017 is zero and the end target at end of 2020 is that all 28 program counties. The DLI disbursements (scalable) will be made annually against reached targets. The estimated targets in each of 2018 through 2020 are 28 counties. Guangxi Audit Office will carry out the verification during annual financial audit process through

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/ agency	Verification Entity	Procedure
		expenditure classification shall be agreed with the Bank, and be specified in the provincial government's guidelines.			reviewing the counties' Annual Program-based Budgeting Plans and Annual Program-based Expenditure Reports against the template specified in the provincial government's guideline.
8	Poverty data platform for monitoring and evaluation of poverty reduction	The poverty data platform will be developed and curated at the Information Technology office of the Guangxi Region Poverty Reduction Office.	Report prepared by RPRO	Third party verification agency	DLI disbursements will require meeting the following conditions: (1) data platform is available and operative for use by authorized staff for both consultation as well as production of statistical reports and yearbooks; (2) data platform includes additional databases to enhance the monitoring and evaluation capabilities of the users (Information from PRLEs and cooperatives; information on budget and beneficiaries from training programs; information from Infrastructure Project management system; information on budget expenditures by county as per new expenditure categories), and (3) data are preserved. The independent VA will confirm that the data platform concurs with agreed quality standards in terms of data preservation, integration, security and dissemination.

V. PROGRAM ECONOMIC EVALUATION

Introduction

243. The Guangxi Poverty Eradication Program (PEP) needs to be evaluated based on its effectiveness in securing sustainable transitions out of poverty. The key contributors to poverty eradication include income growth, and improvements in access to basic infrastructure, notably water and roads. These targets are measured by the respective poverty indicators. The principal channel for increasing rural incomes under the program includes enterprise support (dragonhead enterprises and communes) and vocational training. Public resources dedicated under the CYFP to enterprises include selection effort, subsidies, and tax expenditures from dragonhead enterprises (i.e., tax exemptions). Public investments will need to secure basic access (connectivity of all natural villages, minimum water quality), but also provide wider benefits to the population between the registered poor (e.g., non-poor households in natural villages).

244. In terms of minimum income levels needed to escape poverty, households will either rely on market incomes or welfare. The alternative to securing incomes from productivity income would be to make households fully reliant on transfer payments (Dibao). Given some level of other incomes (local productive income, remittances), poor households will typically only require gap filling transfer payments. But if fully dependent on transfers, the government will need to pay recurrent Dibao into the future to the level of the future nominal income poverty line. The authorities have underscored their commitment to poverty eradication under the current key metrics (income, and access to basic services), while underscoring that Dibao should really be seen as a last resort for households that do not have the physical-human capital to secure market-based incomes.

245. CYFP programs should be the predominant mechanism for poverty eradication among a subset of Guangxi's poor. According to the estimation of the "13th FY Poverty Reduction Plan of Accurate Targeting through Agriculture Industrialization of Guangxi Autonomous Region", there were 4.25 million people to be lifted out of poverty in Guangxi at the end of 2015. Among them, 2.03 million poverty population with necessary conditions and labor ability could graduate from poverty through CYFP, accounting for 45 percent of the poverty population. The Technical Assessment field studies in poverty villages informed us that the proportion should be about 30 percent according to village chiefs. Therefore, 30 percent will be taken as a conservative scenario and 45 percent will be treated as an optimistic scenario for estimation in the analysis. Detailed micro-data on public resource allocation to individual enterprises and households is not available, so the approach has been to understand both the absolute and relative cost of poverty eradication in Guangxi under these assumptions.

246. The PforR applies Cost-Effectiveness Analysis (CEA) to estimate the output ratio of unit program input and assesses the efficiency of output. The PforR investments are appropriate under the prevailing results chains to achieve the objectives of income growth and basic infrastructure access. Conventional Cost-Benefit Analysis (CBA) is not very appropriate for an accurate economic valuation, given data limitations and that the focus is on achieving a general poverty eradication target set by the government. The types of activities and projects of CYFP in counties are diverse, but the program is seen as the most promising mechanism likely to translate into productive income gains for the poor. The CEA analysis therefore focuses on benchmarking likely unit costs in Guangxi, and also relating these to national relatives. In the case of key access infrastructure, the unit costs to poverty reduction are comparable favorably to national benchmarks.

Results

247. The CYFP CEA was conducted based on available data for three sample counties. The poverty population in Tengxian, Du'an and Tianlin at the end of 2017 was 44,206, 79,946 and 32,441 respectively, totaling 156,593. Applying the conservative scenario, CYFP in the coming three years can help 13,262, 23,984 and 9,732 respectively graduate from poverty, totaling 46,978; these numbers will be 19,893, 35,976 and 14,598 respectively, totaling 70,467, when the optimistic scenario is applied. The projected fiscal CYFP funds in the three counties of Tengxian, Du'an and Tianlin of the year is respectively RMB 1.173 million, 1.846 million and 0.584 million, totaling RMB 3.603 million. Each county on average has RMB 1.201 million/year³¹. Assume that the investment intensity in the coming three years remain unchanged, the fiscal CYFP fund input during 2018-2020 will be respectively RMB 3.519 million, 5.538 million and 1.752 million, totaling RMB 10.809 million. Using the above data can estimate the fiscal CYFP fund input needed to lift one poor out of poverty in the three counties during 2018-2020, which is about RMB 15,000-23,000/person (refer to Table 14).

Table 16. Estimated input/output ratio of fiscal CYFP fund, 2018-2020 in Tengxian, Du'an and Tianlin counties

	Tengxian	Du'an	Tianlin	Total
Number of the poor graduated from poverty through CYFP				
A. Conservative (Person)	13,262	23,984	9,732	46,978
B. Optimistic (Person)	19,893	35,976	14,598	70,467
Fiscal input to CYFP (RMB million)	351.9	553.8	175.2	1,080.9
Fiscal input needed to lift 1 person out of poverty through CYFP				
A. Conservation (RMB/person)	26,534	23,090	18,002	23,009
B. Optimistic (RMB/person)	17,690	15,394	12,002	15,339

Assessment of output efficiency

248. According to the estimation, the input/output ratio of fiscal CYFP funds during 2016-2017 was respectively RMB 26,880/person and RMB 36,199/person nationwide. The average input/output ratio of fiscal CYFP fund in the three counties of Tengxian, Du'an and Tianlin in 2016 and 2017 was respectively RMB 13,403/person and RMB 17,915/person. Given the declining trend³² of marginal output ratio of fiscal funds over years and comparing with the above, the estimated input/output ratio of CYFP funds of the three project counties from 2018 to 2020 is sound.

³¹ The investment strength is significantly higher than the estimation of the 13th 5YP Poverty Reduction Plan through Accurate Targeting of Guangxi. According to the estimated data of the Plan, the fiscal investment in CYFP in the 54 poverty counties during the 13th 5YP is RMB 848.4 million/year, each county on average is RMB 15.71 million.

³² Wang Sangui, et al, Analysis on the fields of investment of poverty reduction funds and results, 2005 issue 5. The change input/output ratio of fiscal poverty reduction funds nationwide and the three counties from 2016 to 2017 also reflected such trend.

Table 17. Comparison of input/output ration of fiscal poverty reduction funds

	2016	2017	2018-2020
Nationwide			
Total amount of consolidated agriculture-related fiscal funds (billion RMB) ^{1/}	333.3	466.6	
Population graduated from poverty nationwide (million)	12.4	12.9	
Fiscal CYFP fund needed to graduate 1 poor (RMB/person)	26880	36199	
Tengxian, Du'an and Tianlin 2/			
Total amount of consolidated agriculture-related fiscal funds (million CNY)	862.99	1259.8	
Population graduated from poverty annually (person)	64389	70319	
Fiscal CYFP fund needed to graduate 1 poor (RMB/person)	13403	17915	
Tengxian, Du'an and Tianlin			
Input of fiscal CYFP fund to graduate 1 poor			
A. Conservative (RMB/person)			23009
B. Optimistic (RMB/person)			15339

1/ The earmarked fiscal poverty reduction funds of central and local government from 2016 to 2017 was respectively RMB 100 billion and RMB 140 billion. According to data of Guangxi, earmarked fiscal poverty reduction funds accounted for 30% of the consolidated agriculture-related funds, based on which, the consolidated agriculture-related fiscal funds nationwide can be estimated.

2/ 2016 data is the sum of Du'an and Tianlin.

249. The strengthened vocational training will yield significant life time beneficiary productive income streams, and avert a reliance on welfare payments. The unit costs of training are projected to be significantly smaller than an alternative reliance on welfare payments. The counterparts are finalizing data on unit cost estimates, but the PforR CEA will also depend on effective targeting of farmers. The training will also be complementary input to the investments made in enterprises. Vocational training serves to ensure that poor farmers are able to meet in a cost-effective manner demand linkages from enterprises, as professional farmers attain quality and productivity thresholds relative to non-poor/commercial farmers.

Road construction CEA in poverty villages

250. Natural village road access remains a binding constraint to poverty reduction. The Guangxi 13th 5YP calls for the designated poor counties to further improve the road network and transport services, with the following key objectives: (i) paved road access to all administrative villages; and (ii) paved or gravel road access to all large natural villages (≥ 20 households). Given that the village roads connecting administrative villages are expected to be 100 percent completed by the end of 2017, the activities supported by this PforR (2018-2020) would focus on the following: (i) construction/rehabilitation of natural village roads (\leq Class IV); (ii) rehabilitation of damaged bridges; (iii) embedding road safety facilities for rural roads; and (iv) rehabilitation of rural roads facilitating tourism and productivity development (\leq Class IV).

251. Program expenditures for roads also provide wider benefits to non-poor. Upgrades in road standards will also improve the economic life of roads, particularly in the face of weather shocks. In the absence of project level appraisal data, economic benefit to be brought about by road and in-village road in particular is uncertain and difficult to estimate. CEA data suggests that unit costs of investments on a km

and beneficiary basis are well in line with national levels. The Poverty Reduction Office of Guangxi provided the survey of natural villages of over 20 households without road in the 28 PforR project counties. In this report, the amount of investment per kilometer of road and the number of beneficiaries per RMB 10,000 of investment is used as indicator to assess the input/output ratio of investment in village roads. According to data provided, comparison of the indicator is as follows: (i) Comparison between poverty villages with non-poverty villages of 28 PforR project counties; and (ii) Comparison between poverty villages of the 28 PforR project counties with poverty villages of the region. The results of comparison is provided in Table 16.

Table 18: Comparison of input/output ratio of investment in village road construction in different sample villages (natural village of over 20 households without road)

	Poverty village of PforR counties	Non-Poverty village of PforR counties	Poverty village of the region
Number of NVs of over 20 households without road (each)	1978	2214	5729
Planned investment (million RMB)	1430.5	1484.5	3184.7
Planned length (km)	4476	5066	9674
Expected beneficiaries (person)	793045	1158371	2394672
Estimated investment per km village road (RMB 10,000/km)	32.0	29.3	32.9
Number of beneficiaries of unit investment (person/RMB 10,000)	5.5	7.8	7.5
Number of beneficiaries of each NV (person/village)	401	523	418

252. The amount of investment per kilometer of village road revealed that the unit investment in village road in poverty villages of the PforR counties is close to those for non-poverty villages and poverty villages of the region, but the number of beneficiaries per unit investment is slightly lower, which is related to the fact that the number of beneficiaries in the poverty villages of PforR counties is relatively smaller. From Table 16, one can see the number of beneficiaries of each natural village as: 523 on average for non-poverty village of PforR counties, 418 on average from poverty villages of the region, and 401 on average for poverty village of PforR counties. In addition, most project counties are located in mountainous areas, implying that the cost of road construction is rather high. Considering the above factors, the input/output ratio of village road construction in poverty villages of PforR counties is acceptable.

Water Access

253. Minimum access of water is a precondition to households exiting poverty. The program focused on both delivering water access to all households still lacking this in the archive, as well as promoting higher quality. Beyond archive poverty reduction, this is likely to yield significant benefits in terms of household welfare and likely health status. The counterparts are finalizing data on projected water access projections for 2018-2020, and projected program levels. Particularly program expenditures focused on improving attention to water quality are not likely to involve high unit levels of expenditures, but yield significant returns in terms of targeted household welfare and health status.

VI. IMPLEMENTATION SUPPORT PLAN

Strategy and Approach for Implementation Support

254. Implementation of this operation will require considerable focused support from the Bank team. This is the first multi-sectoral PforR. Bank implementation support will include (a) reviewing implementation progress (including that of the PAP) and achievement of PforR results and DLIs; (b) monitoring the adequacy of system performance and compliance with fiduciary and environmental and social requirements; and (c) providing ongoing technical support.

255. Technical support. The Bank team including staff from across the practices has provided extensive technical expertise during preparation. The Bank team will continue to provide technical support during implementation to ensure that the agreed improved practices and protocols will be implemented accordingly.

256. Fiduciary support. The implementation support from procurement and the financial management team will focus on reviewing and monitoring the compliance with the government own systems and the conditions defined in the legal agreements. The implementation support will also provide technical assistance to address the few shortcomings identified in the fiduciary assessment.

257. Environmental and social aspects. The Bank team will provide guidance to the agencies to ensure the completion of the actions agreed in the PAP.

Implementation Support Plan

258. Most Bank team members will be based in the China Country Office, located in Beijing. This will ensure rapid and effective response to borrower's needs for implementation support. In addition, a few Washington-based staff and international consultants would also be part of the task team to bring global technical experience to the operation. Formal implementation support missions and field visits covering all aspects of implementation will be carried out periodically during implementation. Estimated inputs from different specialists at different stages of implementation are outlined in Table xxx.

Table 19. Implementation Support Input Requirements

Time	Focus	Skills Needed	Resource Estimate	Partner Role
First twelve months	<ul style="list-style-type: none"> • Team leadership • Technical implementation support • Financial management and procurement • Environmental and social aspects implementation support • Results M&E and verification of DLIs • Capacity building 	<ul style="list-style-type: none"> • Technical • Financial management • Procurement • Environmental and social aspects 	6–8 staff, 3 trips per staff	n.a.
12–30 months	<ul style="list-style-type: none"> • Technical implementation support • Financial management and procurement • Environmental and social aspects implementation support • Results M&E and verification of DLIs 	<ul style="list-style-type: none"> • Technical • Financial management • Procurement • Environmental and social aspects 	6–8 staff, 1–2 trips per staff per year	n.a.

Table 20. Task Team Skills Mix Requirements for Implementation Support

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
General technical support on poverty reduction programs management, coordination and general project management	20	5–8	The focus will be technical and team leadership, conducting focal liaison and communications with the client, and tracking of the overall program results delivery. Country-based staff may travel more frequently for short visits/meetings to provide the client rapid support.
Agricultural industrialization	16	5	Focus will be on reviewing the compliance with the agreed PDHE accreditation and cooperative standards. Country-based staff may travel more frequently for short visits/meetings to provide the client rapid support.
Skills training	10-12	4	Focus will be on monitoring the progress on scaling up the New Professional Farmer Development training program and assuring its quality and impact on income. Workshops may be organized to share experiences among targeted counties. Country-based staff may travel more frequently for short visits/meetings to provide the client rapid support.
Drinking water supply	4–6	4	Initial focus will be on assisting the responsible authorities revise the technical guidelines on engineering design for rural water supply and monitoring then construction of rural drinking water systems. Country-based staff may travel more frequently for short visits/meetings to provide the client rapid support.
Rural roads	4–6	4	Initial focus will be on assisting the client to prepare detailed technical guidelines for road construction design to mitigate climate related risks and monitor then rural road construction activities. Country-based staff may travel more frequently for short visits/meetings to provide the client rapid support.
IT-based Rural Infrastructure Pipeline Project Management System and annual budget plan and expenditure reports.	6-8	6	Initial focus will be on assisting the regional PRO to develop the system protocol and guideline. Country-based staff may travel more frequently for short visits/meetings to provide the client rapid support.
Poverty M&E systems	4-6	4-5	Focus will be on supporting the client on establishing the poverty data platform and integration of the relevant databases. Washington-based staff to provide the client technical support.
Financial management and budget	4–6	3–4	Focus will be on assisting the client to address all the measures agreed in the PAP of the outcome of such measures.
Procurement	4–6	3–4	Focus will be on assisting the client to address all the measures agreed in the PAP of the outcome of such measures.
Environmental safeguards	2–4	3–4	Focus will be on assisting the client to address all the measures agreed in the PAP of the outcome of such measures.
Social safeguards	2–4	3–4	Focus will be on assisting the client to address all the measures agreed in the PAP of the outcome of such measures.

Role of Partners in Program Implementation

There are no areas for technical cooperation with partners identified for this operation in Guangxi.

VII. PROGRAM ACTIONAL PLAN

Action Description	DLI #**	Responsibility	Recurrent	Frequency	Due Date	Completion Measurement**
Issuance of the Working and Implementation Plan for the Accreditation and Management of Poverty Reduction Leading Enterprises (PRLE) in Guangxi under Document 62.	1	Guangxi Poverty Reduction Office	No	One time	November 30, 2018	Adoption working and Implementation Plan for PRLEs by official regional government document and notification of the Bank about the adoption by RPRO
Prepare and install a computerized Management Information System (MIS) for farmer cooperatives	2	Guangxi Department of Agriculture	No	One time	September 30, 2018	Report the installation to the Bank by DoA
Prepare and install a computerized Management Information System (MIS) for PRLEs	3	Guangxi Poverty Reduction Office	No	One time	November 30, 2018	Report the installation to the Bank by PRO
Prepare short Technical Primer on Engineering Design for Rural Water Supply and conduct the training to county design engineers.	5	Guangxi Water Bureau	No	One time	December 31, 2018	Guidelines issued by RPRO and training result assessment report submitted by RPRO
Upgrade the technical standard specifications for natural village roads, with an emphasis on road delivery quality, climate resilience factors and maintenance; and conduct the related trainings to counties.	-	Guangxi Poverty Reduction Office and DRC	No	One time	Notice: September 30, 2018 Training: October 31, 2018	Notice No.62 upgraded and issued by RPRO and training result materials submitted by RPRO
Issue new guidelines requiring Program counties to prepare AFUP and implementation report in a template with expenditure classification in alignment with Guangxi poverty reduction major sub-programs	7	Department of Finance	No	One time	June 30, 2018	Guidelines issued to targeted 28 counties by Department of Finance
Enhance the capacity to manage livestock waste through training and technical support to farmers.	-	Regional Department of Agriculture and their county bureaus	Yes	Once a year	December 31, 2018	Training materials including prototype design, and training result assessment report, submitted by RDOA
Develop a community participation and consultation manual	-	Guangxi Poverty Reduction Office	No	One time	December 31, 2018	Manual issued by the RPRO

Exchange of experiences of adopting community participation in procurement by organizing workshops and issue a manual on community participation in procurement	-	Guangxi Poverty Reduction Office		Workshops once a year	Manual issued by 31 March 2019	Workshops conducted and reported to the Bank; Manual issued by RPRO and a copy sent to the Bank
---	---	----------------------------------	--	-----------------------	--------------------------------	---

Annex 1

Detailed verification criteria for DLI 1: Number of enterprises accredited as Poverty Reduction Leading Enterprises

Definition: The Poverty Reduction Leading Enterprises (PRLEs) means enterprises duly established and operating under the laws of the Borrower that receive accreditation by, in accordance with the Borrower's *Circular on Improving the Certification and Management System of Poverty Reduction Dragonhead Enterprises* (Document No. 62) dated January 2018, and the Accreditation and Management Work Plan.

Accreditation and Management Work Plan: The Accreditation and Management Work Plan (AMWP) is still under preparation and Regional Government approval is pending. In order to make the AMWP acceptable to the World Bank as the basis for the disbursement the following principal provisions should be included:

- 1) The accreditation would be based on a formal application and evaluation process.
- 2) The accreditation would be provided at the Guangxi Regional level by the Regional Poverty Reduction Office setting up a separate evaluation committee and approval body within the RPRO.
- 3) Eligible enterprises should be registered in the Peoples Republic of China. Registration could be inside or outside of the Guangxi Region.
- 4) The AMWP would define a minimum size of operation either by registered capital or past records of sales. [figures to be defined]
- 5) Eligible enterprises should have a good track record of past experience and business performance, which could be defined by debt-asset-ratio (e.g. below 60%), past profitability, credit rating (e.g. at least 'A' level), no overdue tax and social security/welfare payments, no unresolved legal cases, etc.
- 6) Eligible enterprises should have a minimum of two years of audited accounts.
- 7) Focus on marketing and value addition: PRLEs should primarily focus on adding value and marketing of farm products purchased from farmers and farmer cooperatives.
- 8) Outreach to poverty households with measurable indicators (e.g. numbers of poor households to be linked, type and level of support, etc. defined by contracts, intentions of purchase or similar, price premium.
- 9) Commitment to reach targets which involve a written and signed commitment to achieve key business and poverty outreach targets with an understanding that the PRLE status would be withdrawn if the committed targets are not reached. For obtaining accreditation an enterprise should define a set of clear and verifiable targets such as number of farmers or cooperatives to be linked, poverty villages where raw material would be purchased, volume or value of purchase, price premiums to be paid or similar.
- 10) The accreditation should include signing an agreement for reporting and acceptance of third party monitoring by the enterprise. PRLEs would agree to regular reporting and outside monitoring and checking of key poverty related data and information.
- 11) Adequate Technical, Environmental and Social Standards. PRLEs need to commit following appropriate national technical incl. food safety, social (e.g. workers welfare, safety) and environmental standards and regulations.
- 12) Purchase from 28 program counties. To be eligible for disbursement under the PforR enterprises must purchase at least 30 percent of their raw material or farm products from farmers and/or farmer cooperatives in the 28 program counties.
- 13) Commitment to collect and report produce from project areas. PRLEs eligible for disbursement must commit to collect and provide accurate information about their purchases from the 28 program counties (relevant for DLI 3 verification).

- 14) Exclusion of enterprises expanding their own production. Enterprises expanding their own primary production (e.g. by leasing land from farmers for field production or developing livestock raising farms) within 28 targeted counties must not be included as eligible PRLEs. Focus should be given to enterprises purchasing from farmers and cooperatives.
- 15) Regular monitoring and withdrawal mechanism. The AMWP should define a mechanism to monitor performance of accredited enterprises on a regular basis and include a mechanism to withdraw the accreditation in case of non-compliance.
- 16) The evaluation and accreditation would take into account both the past performance of the applying enterprise and a credible commitment to achieve future targets.

Key verification tools:

- 17) Data sheet: The AMWP should include a data sheet covering the basic facts about the applicant enterprise and the above listed eligibility requirement (Number 3) to 14)). These eligibility criteria will be subject to Third-Party verification. [A data sheet is under preparation and will be part of the final guidelines.]
- 18) Scoring System: The AMWP should include a qualitative scoring of the enterprise's likely poverty, social and environmental contributions and commitments. The scoring would take due consideration of the past records and the commitments for future poverty reduction. The enterprises should reach a minimum of [60] out of a total of 100 scores. [A scoring table is under preparation and will be part of the final guidelines.]
- 19) MIS: The information in the data sheet and the scoring results would be included in computerized data base, which would serve as a reporting and monitoring tool as well as a Management Information System (MIS) for the RPRO.

Annex 2

Detailed verification criteria for DLI 2: Number of Pro-poor Farmer Professional Cooperatives meeting the Operational Standards

Definition: “Pro-poor Farmer Professional Cooperative” means a cooperative, which is duly established under the laws of the Borrower and the Program Implementing Entity, and at least thirty percent (30%) of its members are Registered Poor Households or forty percent (40%) of all Registered Poor Households in each of the covered administrative villages are members of said cooperative. “Operational Standards” means a set of standards, acceptable to the Bank, related to a Pro-poor Farmer Cooperative’s registration, membership, financial management, and decision-making arrangements.

Operational Standards: The following checklist should be used for the initial certification of meeting the defined operational standards and for a continued monitoring of the performance of pro-poor cooperatives. The essential compliance parameters to consider a cooperative eligible for disbursement are shown in the right column, where all indicators marked with ‘**✓**’ must be met.

Check list for Pro-Poor Farmer Professional Cooperatives				
		Assessment content and standards	Comp- liance	Required for DLI 2 disburseme nt
I. Registration, Membership, Operational Settings	(i) Formal registration	1. Registration at the Industrial and Commercial Bureau under the Law of farmers' specialized cooperatives in the Peoples Republic of China from 2006 as amended in 2017 effective July 1, 2018		yes
		2. Business license, Organization Code certificate, tax registration certificate, Bank account		yes
	(ii) Genuine farmers' cooperatives	3. Ordinary Farmer members are at least 80% of the total number of members, and other members of enterprises, institutions or social organizations shall not exceed 5%.		yes
	(iii) Asset recognition	4. Each member has a clearly defined share. A complete list is available. The proportion of all Members' shares is 100%.		yes
		5. Fixed assets (buildings and equipment) are appropriately validated. Cash contributions are deposited in the cooperatives' account. Land contributions are clearly recorded and validated in agreements with the cooperative's general assembly decisions making.		yes
	(iv) Member information	6. Cooperative has at least 20 members.		yes
		7. A full membership list is maintained including information such as name of the member, gender, ID number, occupation, home address, poverty status, shareholding ratio, contact information.		yes
	(v) Shares composition	8. Ordinary farmer members hold total shares of at least 60% of the cooperation shares.		yes

	(vi) Distribu tion of profits	9. The cooperative has a written and clear profit distribution system.		yes
		10. The profit distribution arrangements are adopted by all members prior to the commencement of each fiscal year, the distribution of profits explains the reserves (non-distributed profits), distributable profits by means of distribution such as volumes traded, capital shares owned) with clear percentages allocated.		yes
	(vii) Particip ation of poor househo lds	11. At least thirty percent (30%) of the cooperatives members are Registered Poor Households <u>or</u> forty percent (40%) of all Registered Poor Households in each of the covered administrative villages are members of the cooperative. (only one of the two criteria needs to be met)		yes
	(viii) Environ mental standar ds	12. The cooperative adheres to Good Agricultural Practices (GAP) and follows national standards and good practices regarding agricultural waste management, soil erosion control and water management, recirculation of resources, reduced use of chemical fertilizers and pesticides, and other sustainable and climate smart agriculture/livestock practices and technologies in its operation.		-
II. Financial Management	(i) Account ing	13. The cooperative has a qualified accountant or entrusted the rural management agencies or other accounting agencies with bookkeeping, accounting.		yes
	(ii) Financia l software	14. The cooperative uses a computerized accounting software for bookkeeping		yes
	(iii) Financia l records	15. Financial management and accounting under the financial management approach.		-
		16. Accurate recording of financial information and timely data updates (records are computerized not more than one month after transactions occurred).		-
	(iv) Financia l stateme nts	17. Interim financial reports can be produced at any time and are available to the Board of Supervisors for review.		-
18. Clear annual financial statements are prepared at the end of the fiscal year including a profit and loss statement, a simple balance sheet and a profit distribution table.			-	
III: Governance and Decision making	(i) Meetings	19. Members (representatives) the General Assembly, the Council, the Board of Supervisors and other institutions are sound and operate effectively.		-
		20. At least the first three mandatory meetings (General Assembly, Council, Board of Supervisors) are conducted with minutes available		yes
		21. Regular meetings including mandatory three meetings each year are conducted, with minutes prepared and recorded.		-

	(ii) Trans- parency	22. Summary financial information, asset information and earnings and loss information is disclosed and publicly displayed not less than one months after the closing of the financial year.		-
--	------------------------	--	--	---