



LoCAL Pilot Phase in Bhutan

FINAL ASSESSMENT

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Cover photo: Local children on bailey bridge in Rameychen Village, Phobji Gewog. With support from the LoCAL country programme in Bhutan, the local government built this bridge to replace a wooden bridge which had rapidly deteriorated due to increased rainfall in the locality in recent years; photo © Ugen P. Norbu

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Acronyms

| | |
|--------|---|
| BTN | Bhutanese ngultrum |
| CCA | climate change adaptation |
| DLG | Department of Local Governance |
| DT | <i>dzongkhag tshogdu</i> |
| FY | fiscal year |
| FYP | Five-Year Plan |
| GNH | Gross National Happiness |
| GNHC | Gross National Happiness Commission |
| GT | <i>gewog tshogde</i> |
| JSP | Joint Support Programme |
| LGSP | Local Government Support Programme |
| LoCAL | Local Climate Adaptive Living Facility |
| PAM | Performance Assessment Manual |
| PBCCA | performance-based climate change adaptation |
| PBCRG | performance-based climate resilience grant |
| PHCB | Population and Housing Census of Bhutan |
| RGoB | Royal Government of Bhutan |
| UNCDF | United Nations Capital Development Fund |
| UNFCCC | United Nations Framework Convention on Climate Change |

GLOSSARY OF BHUTANESE TERMS

| | |
|--------------------------|---|
| <i>chiwog</i> | Village or group of hamlets |
| <i>dzongdag</i> | District administrator, a civil service official appointed by the central government. He or she functions as the executive head of the <i>dzongkhag</i> administration. |
| <i>dzongkhag</i> | District |
| <i>dzongrab</i> | Deputy district administrator, a civil service official appointed by the central government |
| <i>dzongkhag tshogdu</i> | District council, the highest executive decision-making body at the <i>dzongkhag</i> level. It is chaired by a <i>gup</i> elected by the <i>dzongkhag tshogdu</i> members, and comprises other <i>gups</i> and elected local government representatives as members. |
| <i>gewog</i> | A block of villages, constituting the smallest public administration unit |
| <i>gewog tshogde</i> | Block committee, the highest executive decision-making body at the <i>gewog</i> level. It is chaired by the <i>gup</i> and comprises <i>mangmi</i> and other elected local government representatives as members. |
| <i>gup</i> | Elected head of a <i>gewog</i> |
| <i>mangmi</i> | Elected representative of the local community; functions as a deputy to the <i>gup</i> |

Executive summary

As a least developed country and with a predominantly fragile mountain ecosystem, Bhutan is highly vulnerable to climate change and its impacts. Socio-economic development is greatly dependent on climate-sensitive sectors such as agriculture, hydropower, forestry and road transport. Furthermore, as a mountainous country with a huge area of snow and glaciers and an intricate natural drainage system of watersheds and water catchments, the country is intrinsically exposed to and affected by multiple climate change hazards including glacial lake outburst floods, landslides and flash floods. Reduced precipitation during winter in recent years has given rise to increased forest fire risks and seasonal water scarcity in many areas. Severe windstorm events are becoming more frequent; these have damaged numerous homes, schools, health facilities, government offices and temples, as well as many tons of crops.

The United Nations Capital Development Fund supported the Royal Government of Bhutan in implementing a pilot Local Climate Adaptive Living Facility (LoCAL) programme over the past two fiscal years – 2011/12 and 2012/13 – to enhance community resilience and adaptive capacity for climate change at the local level. It was integrated as a key component of the larger Joint Support Programme on Capacity Development for Mainstreaming Environment, Climate Change and Poverty Concerns in Policies, Plans and Programmes.

The LoCAL programme supported the delivery and utilization of performance-based climate

change adaptation (PBCCA) grants in four local governments: Wangduephodrang Dzongkhag, Phobji Gewog, Zhemgang Dzongkhag and Nangkhoh Gewog.

A final assessment of the pilot LoCAL programme in Bhutan was carried out between 25 October and 5 December 2013 to (i) take stock of the LoCAL programme at the end of its pilot phase to determine what has been achieved against the outcome, outputs and targets as stated in the programme's strategic results framework; (ii) examine the extent to which the local governments have met the minimum conditions of the PBCCA grants and addressed local climate change adaptation (CCA) needs; and (iii) assess the possibility of extending the LoCAL programme into a next phase and recommend how it can be strengthened and carried forward, taking into account the lessons learned from the pilot phase.

The key findings of the assessment are summarized below.

- The LoCAL programme has fundamentally achieved almost all of its planned targets. These include the development and adoption of the performance assessment system and manual for local government financial management and CCA on a pilot basis; integration of CCA in the Local Development Planning Manual; and the planning, delivery and utilization of PBCCA grants for local-level investments in the pilot *dzongkhags* and *gewogs*.

- A total of 38 investments were made at the local level to enhance community resilience and adaptive capacity for climate change. The majority of these investments pertained to improvement of water supply systems (for farming and household use – 24 per cent) and transport infrastructure (road, mule track and bridge – 21 per cent) for enhanced resilience against climate change impacts such as landslide, flash flood and surface erosion.
- The two biggest investments in terms of funds expended were the construction of an elevated Bailey bridge in Rameychen, Phobji Gewog, at a cost of BTN 3,908,000 and improvement of the Buli-Nimshong farm road in Nangkhör Gewog at a cost of BTN 3,145,000. These two activities accounted for about 38 per cent of the LoCAL funds. The large expenditure for these two activities was justified given the widespread significance they had for the overall development of local communities not only within the *gewog* but in adjacent *gewogs* as well.
- The LoCAL activities in general were planned and implemented with a sound rationale in terms of CCA and community development benefits. Most of the LoCAL activities involved community-level investments and therefore had widespread community benefits. A small proportion of the LoCAL programme involved household-level investments. Although the benefits of such investments such as bio-gas plants were limited to only a few families, it is presumed that they will provide visibility, encouraging other families to adopt similar interventions and triggering a multiplier effect.
- The LoCAL activities were largely invested at the community level, encompassing all sections of rural society. There was no distinction made from a gender point of view. Nevertheless, it was noted that some of the investments – improvement of water supply systems, bio-gas plants and crop diversification support – would entail larger benefits for women.
- The minimum conditions set for the PBCCA grants have been met to a large extent. The activities proposed for the PBCCA grants were in accordance with the functional and financial responsibilities of the *dzongkhags* and *gewogs*, and were deliberated on and endorsed by the respective *dzongkhag tshogdus* and *gewog tshogdes* (district councils and block committees). However, the grants could not be planned and budgeted in line with the regular planning and budgeting cycle, as the LoCAL programme became operational after the 2011/12 fiscal year cycle ended. In response to this issue, a climate change vulnerability assessment and CCA planning were undertaken in the pilot local governments with the assistance of a consultant, leading to an investment menu of a wide range of potential CCA activities that the local governments could undertake.
- The Performance Assessment Manual is well-intentioned and has been designed to ensure high-quality investments and effective utilization of PBCCA grants by the local governments. However, it is dense and contains some impracticable performance parameters for the local government level.
- Some key lessons and good practices can be drawn from the pilot phase of the LoCAL programme. These include use of the participatory rural appraisal method for climate change vulnerability assessment and CCA planning to overcome communication constraints posed by a low literacy level and community reticence in rural areas; visual documentation of the pre-investment situation to demonstrate the difference made by programme support; and integration of LoCAL as a key component in the larger Joint Support Programme, leading to synergy in programme management and implementation.
- The experience from the pilot phase shows that PBCCA grants cannot realize their potential and objectives based on a

single-year intervention. For PBCCA grants to have a chance to work effectively and demonstrate their value as a climate change mainstreaming mechanism, they have to be tried over multiple years. The single-year intervention also did not give the LoCAL programme the opportunity to normalize the PBCCA grants into the local government annual planning and budgeting system in successive years, since planning and funds were delayed in the first fiscal year.

Based on the assessment, the following recommendations are offered.

- The PBCCA grants need to be continued and taken into a next phase with a multiple-year time frame to provide the mechanism sufficient scope to realize its potential of demonstrating how CCA additionality can be mainstreamed through performance-based planning and fiscal measures. This recommendation is based on the following considerations:
 - The concept of PBCCA grants is of immense value to Bhutan. They are seen as contributing to environmental sustainability, equitable socio-economic development and good governance, which constitute three of the four Gross National Happiness pillars. Because it is the poor who are the most vulnerable to climate change, the PBCCA grants have significance for poverty reduction, which Bhutan and its development partners share as an overarching development goal.
 - Opportunities for, and the relevance of, PBCCA grants will be greater in the 11th Five-Year Plan. The annual grants system for local governments, fiscal decentralization initiatives and the Local Development Planning Manual that were introduced in the 10th Five-Year Plan are expected to be encouraged further in the 11th Five-Year Plan. Furthermore, the enactment of the Local Governments Act in 2009 and subsequent promulgation of the Local Government Rules and Regulations in 2012 have established a comprehensive legal and procedural framework for empowerment of local governments in the new democratic political context.
- The first year of the next phase should be devoted to strengthening the PBCCA grant system and preparing for its operationalization at the local government level. This would include review and revision of the Performance Assessment Manual, sensitization of and advocacy among stakeholders at the central and local levels, development of a participatory rural appraisal toolkit for climate change vulnerability assessment to aid local-level CCA planning, and training of local government staff in the use of the toolkit and integration of the assessment results into the annual planning and budgeting system at the local level.
- Roll out PBCCA grants to new local governments, giving priority to the poorest *gewogs*. Emphasis should be given to community-level investments with sufficient flexibility to accommodate household-level investments if such investments are deemed to be meaningful in certain local circumstances. However, well-defined criteria need to be developed and followed in selecting households to ensure transparency and minimize the likelihood of community discontent and stress.
- Prioritize investments for PBCCA grants so they are not thinly spread over too many activities. Make implementation of the prioritization process as outlined in the Local Development Planning Manual, climate change vulnerability assessments and CCA planning mandatory for PBCCA grants.
- Ensure that the performance of PBCCA grants can be assessed accurately, and that the PBCCA mechanism is able to deliver the intended results by aligning the grants with the annual planning and budgeting time frame from the outset.

1 Introduction

BACKGROUND AND PURPOSE

With support from the United Nations Capital Development Fund (UNCDF), the Royal Government of Bhutan (RGoB) implemented a pilot Local Climate Adaptive Living Facility (LoCAL) programme under the aegis of the Joint Support Programme (JSP)¹. The LoCAL pilot in Bhutan has been operational for the past two fiscal years (FYs) – 2011/12 and 2012/13 – and is described in greater detail in the next chapter.

This assessment was carried out to:

- take stock of the LoCAL programme at the end of its pilot phase in terms of its achievements against the outcome, outputs and targets stated in the programme's strategic results framework;
- examine the extent to which the local governments have met the minimum conditions of the performance-based climate change adaptation (PBCCA) grants and addressed local climate change adaptation (CCA) needs; and
- assess the possibility of extending the LoCAL programme into a next phase and recommend how it can be strengthened and carried forward taking into account the lessons learned from the pilot phase.

¹ The initiative's full title is Joint Support Programme on Capacity Development for Mainstreaming Environmental, Climate Change and Poverty Concerns in Policies, Plans and Programmes.

The terms of reference for the assessment are appended as Annex 1.

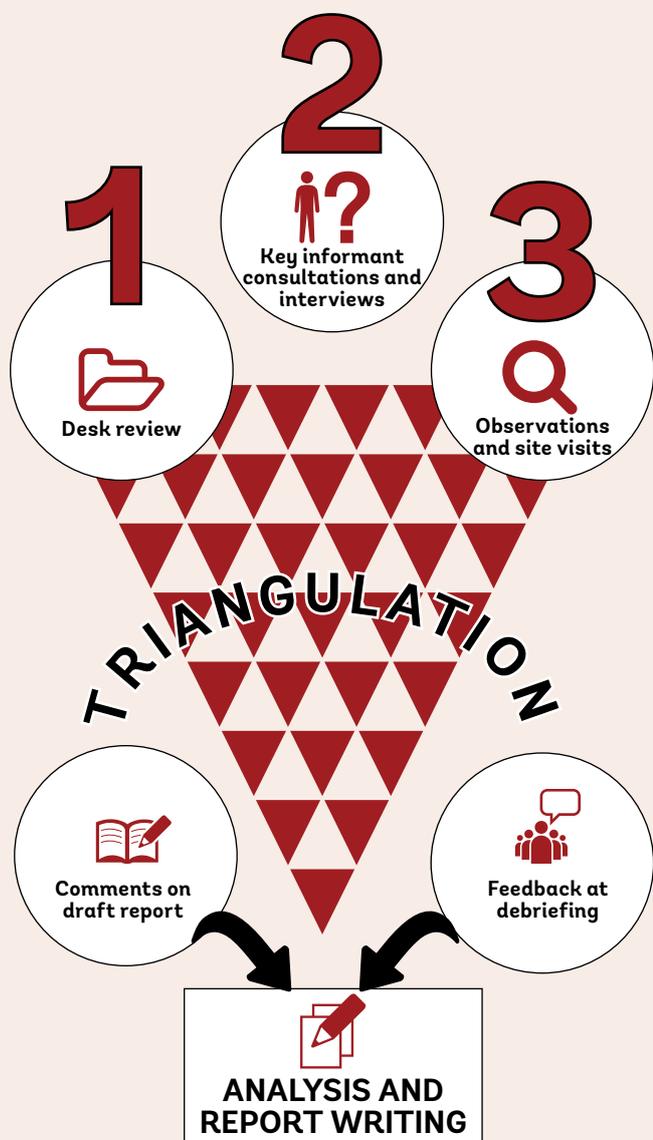
METHODOLOGY

The assessment is based on information elicited from (i) desk review of secondary information, (ii) consultations with key informants in workshops/focus group discussions and semi-structured interviews and (iii) observation of LoCAL activities. Key to the assessment was the triangulation of information derived from these various sources in order to enhance the veracity of the observations and analysis. Figure 1.1 summarizes the methodological framework.

Desk review of secondary information

The desk review looked at the following documents: JSP programme document, LoCAL Bhutan country programme document, LoCAL global programme document, LoCAL Bhutan scoping mission report, Preliminary Performance Assessment Report 2012, Performance Assessment Manual (PAM) for Local Government Public Financial Management and CCA Performance, Local Development Planning Manual, annual grants guidelines for local governments, physical and financial progress reports of the pilot local governments, and minutes of the meetings of the JSP Steering Committee and Programme Management Group.

FIGURE 1.1: Assessment methodology



Other relevant documents – including the 11th Five-Year Plan (FYP) main document, the Local Governance Sustainable Development Programme and the draft Evaluation Report of the Local Governance Support Programme – were also examined to gain an understanding of the overall strategic context within which the LoCAL programme could operate and add value. For background, the assessment referred to the Annual District Statistics (2012), the Atlas of Bhutan on Land Cover and Use (1995), Population Projections (2006–2015), and the

Poverty Analysis Report 2012. See Annex 2 for a complete list of documents reviewed and referenced.

Consultations with key informants

At the central level, **semi-structured interviews** were conducted with key informants in the Department of Local Governance (DLG) in the Ministry of Home and Cultural Affairs, the Local Development Division of the Gross National Happiness Commission (GNHC) Secretariat, the Department of Public Accounts and the Department of National Budget in the Ministry of Finance, and the National Environment Commission Secretariat. Relevant staff of UNCDF and the United Nations Development Programme (UNDP) were consulted to secure additional information and insights. Interviewees are listed in Annex 3.

Site visits were undertaken 3–17 November 2013, to consult with local key informants and observe field activities. At the outset of the site visit to each *dzongkhag*, a half-day **workshop** was conducted with a group of local government officials. The workshop agenda is appended as Annex 4.

The workshop primarily comprised three **focus group discussions** centred on (i) implementation of LoCAL activities – how were they selected and implemented, (ii) key benefits from the LoCAL activities and challenges experienced in their planning and implementation and (iii) ways to strengthen the LoCAL programme if it is to be taken to a next phase. The workshops provided an overview and general understanding of how the LoCAL programme has been implemented and the perception of the local stakeholders with regard to the benefits and challenges of LoCAL activities, and the way forward.

Following the workshops, semi-structured interviews were conducted with key individuals to derive more detailed information and insights. A total of 56 people were met with

during the course of the assessment (see Annex 3). Regrettably, meetings with several key individuals at the local level could not be held as the assessment site visits coincided with other important events: the Wangduephodrang *dzongkhag tshogdu* (district council) meeting 6–8 November 2013, and the GNHC workshop for *dzongkhag* sector heads and planning officers of the central region 13–14 November 2013. In addition, the *gewog* administrative officers from both Phobji and Nangkhori – key personnel involved in LoCAL activities – had been transferred to other *gewogs* over the past year.

Observation of LoCAL activities

A number of LoCAL activity sites were visited in the company of local government officials. On-site interaction with people implementing the activities as well as with intended beneficiaries provided deeper insights into the utilization of LoCAL resources and the benefits of the activities to the local communities.

Analysis and report writing

Upon completion of the site visits, a debriefing was conducted on 25 November 2013 to present the preliminary assessment findings and recommendations to the LoCAL programme management and representatives from relevant agencies and to elicit their feedback (see Annex 3 for the list of participants).

Information gained from the various sources was analysed and incorporated into a draft report. The draft was circulated for review and feedback.

2 Programme context

CLIMATE CHANGE IN BHUTAN

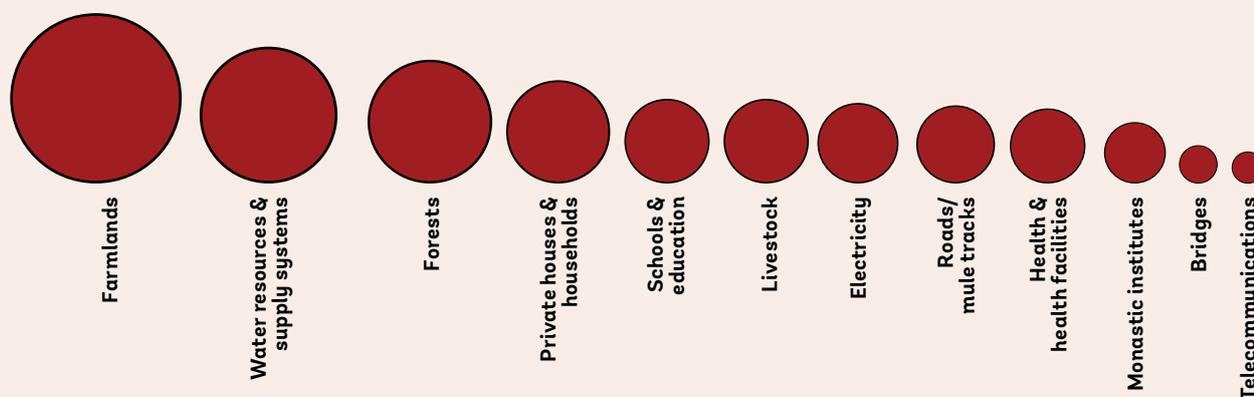
Bhutan does not contribute to global warming and resultant climate change. It is a net sequester of greenhouse gases as a result of vast tracts of forests and a limited number of polluting industries¹. This, however, does not exempt the country from the impacts of climate change. In fact, as a least developed country with a predominantly fragile mountain ecosystem, Bhutan is highly vulnerable to climate change and its impacts. Socio-economic development is greatly dependent on climate-sensitive sectors such as agriculture, hydropower, forestry and road transport. Furthermore, as a mountainous country with a huge area of snow and glaciers and an intricate natural drainage system of watersheds and water catchments, the country is intrinsically exposed to and affected by multiple climate change hazards including glacial lake outburst floods, landslides and flash floods. Reduced precipitation during winter in recent years has given rise to increased forest fire risks and seasonal water scarcity in many areas. Severe windstorm events are becoming more frequent; these have damaged numerous homes, schools, health facilities, government offices and temples, as well as many tons of crops.

¹ The national greenhouse gas inventory, carried out as part of the Second National Communication to the United Nations Framework Convention on Climate Change in 2011, cites the country's greenhouse gas emissions as negative: -4,750 gigagrams.

Participatory rural appraisal-based assessments of environmental and climate change impacts on local livelihoods, resources and assets were carried out in some of the poorest *gewogs* in the country through the JSP. The assessments revealed that farmlands were the most vulnerable of all local livelihood resources/assets, followed by water resources and supply systems, and forests (Figure 2.1). This connotes and confirms considerable climate change risks, as the nation's socio-economic wellbeing is hugely dependent on agriculture, water resources and forests.

Simulated exercises using climate models to project long-term climate scenarios, carried out as part of the Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC), suggest that the mean annual temperature for 2010–2039 is projected to increase by between 0.8°C and 1.0°C compared to the 1980–2009 average, and that mean annual precipitation is projected to increase by 6 per cent for the 2010–2039 period but with more intense and concentrated rainfall in the monsoon season and a generally drier winter season. The projected increase in the frequency and intensity of extreme rainfall events will exacerbate surface runoff and erosion. Saturated soils and highly weathered rock will be increasingly prone to landslides and flash floods in the wet season. On the other hand, reduced precipitation during winters will cause droughts, affecting livelihoods and increasing the risk of loss of biodiversity and agricultural crops, as well as the risk of

FIGURE 2.1: **Proportional impact of climate change vulnerabilities on livelihood assets and resources**



SOURCE: DLG, 'Assessment of Environment, Climate Change and Poverty Vulnerabilities and Identification of Adaptation Responses and Capacity Development Needs of the Local Governments', 2011.

forest fires. Increases in temperature and an erratic pattern of precipitation may also cause sporadic but intense events of wind- and rainstorms.

Bhutan has recognized climate change as a serious challenge to sustainable development since the issue first appeared on the international agenda. It supported the UNFCCC as a signatory at the United Nations Conference on Environment and Development at Rio de Janeiro in June 1992 and followed up with its ratification in August 1995. As a party to the UNFCCC and a country committed to sustainable development, Bhutan completed and submitted its Initial National Communication to the UNFCCC in 2000 and the Second National Communication in 2011. It prepared a National Adaptation Programme of Action in 2006 and updated it in 2012; this enabled the identification of immediate CCA needs and led to the design and implementation of adaptation projects with support from international development partners.

The country committed to remaining a carbon-neutral economy at the 15th Conference of the Parties of the UNFCCC in Copenhagen

in December 2009. In this regard, the RGoB has prepared a National Strategy and Action Plan for Low Carbon Development (2012), which presents a long-term national strategy comprised of various scenarios analysing development paths from 2005 until 2040. In line with these scenarios, the action plan articulates a number of short- and medium-term interventions in various development sectors to achieve sustainable economic growth through green and low-carbon growth.

Bhutan's new Economic Development Policy, which was launched in 2010, is also geared towards a green economy. Among other items, the policy addresses diversification of the economic base with a minimal ecological footprint and reducing dependency on fossil fuel especially for transportation.

The above initiatives have primarily been influenced by the country's long-standing commitment to sustainable development, which is anchored in the overarching home-grown development philosophy of Gross National Happiness (GNH). Bhutan 2020, the country's vision document operationalizing GNH with a 20-year perspective, includes

environmental conservation as one of the four GNH pillars. It emphasizes that development choices must embody the principles of environmental sustainability and must not impair the biological productivity and diversity of the natural environment.

LoCAL PROGRAMMATIC OVERVIEW

Bhutan was the first country in the Asia-Pacific region where a LoCAL country programme was introduced on a pilot basis. The main feature of the LoCAL programme in Bhutan was intended to be the integration of CCA activity planning and performance-based CCA top-up grant financing in local government national annual planning and grant systems. This mechanism was conceived to provide an expeditious and effective means to channel CCA funds to the local government level where they are most needed, while at the same time ensuring ownership, accountability and results. The programme was initiated towards the end of 2010 and implemented over the past two fiscal years (2011/12 and 2012/13) by the RGoB under the overall programmatic aegis of the JSP. Its objective, outcome and outputs are as follows.

- **Development objective.** The LoCAL Bhutan programme aims to increase financing for and investment in climate resilience at the local level in Bhutan, thereby contributing to the achievement of the Millennium Development Goals, particularly the goals of poverty reduction (MDG1) and environmental sustainability (MDG7).
- **Bhutan LoCAL outcome.** The programme's outcome is increased CCA financing and capacity at the local government level through a PBCCA grants system and a strengthened CCA planning process.
- **Outputs.** The outputs under the LoCAL Bhutan programme are:
 - an effective and transparent CCA financing mechanism for local

governments (*dzongkhags* and *gewogs*) through the establishment of a PBCCA grants system; and

- an inclusive, effective and accountable CCA planning process designed and integrated in the local development planning process of *dzongkhags* and *gewogs*.

LoCAL SITES

As a pilot in Bhutan, the LoCAL programme has covered four local governments: Wangduephodrang and Zhemgang at the *dzongkhag* level, and Phobji (Wangduephodrang Dzongkhag) and Nangkhon (Zhemgang Dzongkhag) at the *gewog* level.

Wangduephodrang

Encompassing an area of 4,308 km², Wangduephodrang is the largest of Bhutan's *dzongkhags*, and is comprised of 15 *gewogs*: Athang, Bjena, Daga, Dangchhu, Gangte, Gasetsho Gom, Gasetsho Wom, Khazi, Nahi, Nyimsho, Phangyul, Phobji, Rubeisa, Sephu and Thedtsho. The 2005 Population and Housing Census of Bhutan (PHCB) recorded a population of 31,135; the projected population for 2013 was 36,279². Key population hubs are Bajo, Nobding and Rurichhu. The population poverty rate is 10.9 per cent; this is less than the national population poverty rate of 12 per cent³.

The altitude ranges from 800 to 5,800 m above sea level. As a result of this wide altitudinal range, the climate varies from moderately hot summers in the lower river valleys and gorges to snowy conditions during wintertime in the northern highlands. The *dzongkhag* is rich in hydropower resources and

² Source: Dzongkhag Population Projections 2006–2015, based on the results of the 2005 PHCB, National Statistics Bureau, RGoB, 2008.

³ Source: Bhutan Poverty Analysis 2012, National Statistics Bureau, RGoB, and the World Bank.

home to three major hydropower projects: the Basochhu Hydropower Plant (24 MW) and the Punatsangchhu-I (1200 MW) and Punatsangchhu-II (1020 MW) Hydropower Projects; these latter two are currently under construction.

Phobji Gewog

Phobji Gewog is in the mid-east of Wangduephodrang. The *gewog* covers an area of 138.2 km², with altitudes ranging from 2,800 to 4,000 m above sea level. The climate is generally cold with snowy conditions during winter. The 2005 PHCB recorded a population of 1,929. Major settlements include Dangpa, Dogsar, Gangphel, Jangchen, Kethang, Radhay, Tangchen and Wangchen.

Livestock rearing and potato cultivation are the main livelihoods in the *gewog*. Together with the adjacent Gangte Gewog, Phobji encompasses the picturesque valley of Phobjikha – renowned as a prime winter habitat of the globally threatened black-necked crane (*Grus nigricollis*). The valley is becoming a popular tourist destination due to its harmonious blend of natural landscape and local culture.

Zhemgang

Zhemgang Dzongkhag covers an area of 2,422 km² with eight *gewogs*: Bardo, Bjoka, Goshing, Nangkhor, Ngangla, Phangkhar, Shingkhari and Trong. To ease administrative servicing, a sub-district administration – Panbang Dungkhag – was created in the 1990s to cover the southern *gewogs* of Bjoka, Goshing, Ngangla and Phangkhar. The 2005 PHCB recorded a population of 18,636; the projected population for 2013 was 20,956. Major population centres are Panbang, Tingtibi and Zhemgang.

With a population poverty rate of 26.3 per cent, Zhemgang is among the poorest *dzongkhags* in the country. Poor road connectivity, limited access to markets and rough topography are

often cited as major reasons for the high level of poverty. The local communities subsist primarily on crop farming with livestock rearing and use of forest products to supplement their livelihoods. Traditionally, the practice of slash-and-burn agriculture/shifting cultivation (*tseri*) has been prevalent. In recent years, this has been replaced by more sedentary forms of crop production as a result of government policy intervention.

The *dzongkhag* is rich in forest resources and natural diversity. Forests account for 87.7 per cent of the land cover, and a large part of the *dzongkhag* falls inside protected areas: the Royal Manas National Park in the south, the Jigme Singye Wangchuck National Park in the north-west and the Thrumshingla National Park in the north-east.

Nangkhor Gewog

With an area of 494 km², Nangkhor Gewog occupies the north-central part of Zhemgang. The 2005 PHCB recorded a population of 2,527. Major settlements include Buli, Duenmang, Goling, Kamjong and Tshaidang. The *gewog* office is located in Buli.

The *gewog* has relatively good road connectivity compared to others in the *dzongkhag*. The most important road is the 35 km feeder road from Dakpai to Buli. It is supplemented by a network of another 48 km of farm roads within the *gewog*. As in most other rural areas of Bhutan, the local people subsist primarily on agriculture with livestock rearing and use of forest resources as supplementary livelihood activities.

LoCAL ACTIVITIES

The LoCAL programme has invested in a total of 38 activities, as listed in Table 2.1.

TABLE 2.1: Pilot phase LoCAL activities in Bhutan

| No. | Activity |
|----------------------------------|--|
| Wangduephodrang Dzongkhag | |
| 1 | Installation of bio-digesters in the gewog renewable natural resources centres of Bjena, Gasetsho-gom, Kazhi, Phangyul and Rubeisa |
| 2 | Support for potato seed production to Nakha Samdrup Tshongley Detshen in Nakha Village, Sephu Gewog |
| 3 | Installation of bio-gas plants in five rural homes in Athang and Daga Gewogs |
| 4 | Construction of a bailey bridge over Likcheychhu and associated river training works in Rameychen Village, Phobji Gewog |
| 5 | Grass carpeting and footpath development in Phobjikha Middle Secondary School, Gangte Gewog |
| 6 | Promotion of asparagus and citrus production in Bjena, Daga and Rubeisa Gewogs |
| 7 | Provision of electric stoves, rice cookers and water boilers to schools |
| 8 | Rehabilitation of water reservoir at Shingkhay Village in Gasetsho-wom Gewog ^a |
| Phobji Gewog | |
| 9 | Vegetable trials of improved varieties |
| 10 | L-shaped portland cement concrete drainage along Nenphey-Taphu farm road |
| Zhemgang Dzongkhag | |
| 11 | Improvement of Buli-Nimshong farm road |
| 12 | Improvement of Dangkhar farm road, Trong Gewog |
| 13 | Installation of bio-gas plants in Sonam Thang, Thinleygang, Marangdudh and Tungku Denpa under Panbang Dungkhag |
| 14 | Provision of grass choppers to the gewog renewable natural resources centres of Bardo, Bjoka, Goshing, Nangkhor, Ngangla, Phangkhar, Shingkhay and Trong |
| 15 | Provision of fodder seeds to farmers in Trong Gewog for fodder development |
| 16 | Establishment of forest nursery in Ngangla Gewog to support re-afforestation activities in Lower Kheng |
| 17 | Supply of solar lamps to non-formal education centres |
| 18 | Protection of community water source at Pantang (Phangkhar Gewog), Wamling and Nimshong (Shingkhay Gewog) |
| 19 | Climate change vulnerability study |
| 20 | Renovation of irrigation channel at Khomshar, Phirthigang and Phulabi in Bardo Gewog |
| 21 | Renovation of mule track at Cherchela, Bardo Gewog |
| 22 | Strengthening of retaining wall to protect Bjoka Gewog administration office |
| 23 | Renovation of Gangdar-Redigang and Dalabi-Wamphu mule tracks in Bjoka Gewog |
| 24 | Planting of fruit-bearing trees at Goshing Basic Health Unit and Budhashi Community Primary School in Goshing Gewog |
| 25 | Formation of non-timber forest product groups in six communities in Ngangla Gewog |

(CONTINUED)

TABLE 2.1: **Pilot phase LoCAL activities in Bhutan** (CONTINUED)

| No. | Activity |
|-----------------------|---|
| 26 | Supply of solar batteries to households in Gujong, Pongchula, Ridijong, Tradijong and Chapgoen communities, Phangkhar Gewog |
| 27 | Water source protection and enrichment planting in Phangkhar Gewog |
| 28 | Construction of water supply system for Shingkhar Gewog renewable natural resources centre |
| 29 | Renovation of irrigation channel at Shingkhar |
| 30 | Wind-resilient roofing and improved internal electric wiring of Gomphu, Tama and Zurphey lhakhangs |
| Nangkhor Gewog | |
| 31 | Establishment of community forestry group in Goling |
| 32 | Improvement of Zhobling farm road |
| 33 | Improvement of irrigation channel at Goling |
| 34 | Improvement of irrigation channel at Kikhar |
| 35 | Enhancement of rural water supply scheme at Buli |
| 36 | Awareness of new human diseases |
| 37 | Bamboo planting in landslide-prone areas in Dunmang and hedge row planting in Kamjong |
| 38 | Widening of Kamjong-Tshachugang mule track |

a. Planning conducted and materials procured, but activity but could not be implemented because of retreat of water source.

3 Findings

ACHIEVEMENT OF PLANNED TARGETS

Based on the targets, outcome and outputs set forth in the LoCAL programme's strategic results framework – encompassed within the overall strategic framework of the JSP – the assessment looked at achievement of planned targets in its pilot phase. It found that the LoCAL programme has **essentially achieved almost all of its planned targets**. Table 3.1 on the following page provides an overview of achievements.

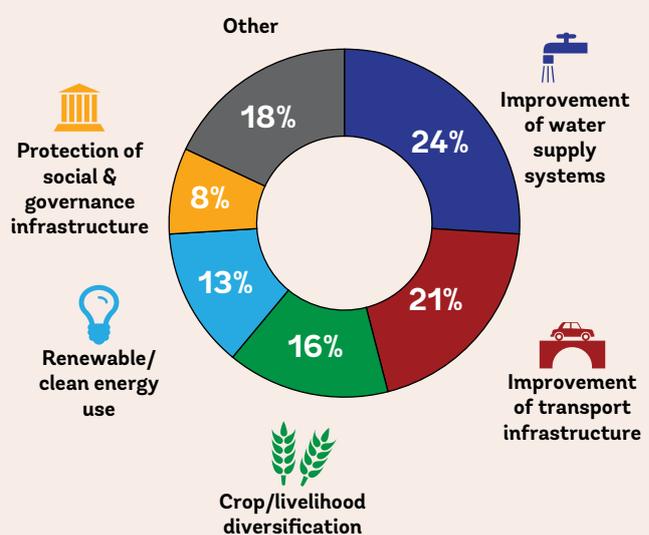
ANALYSIS OF LoCAL ACTIVITIES

Investment analysis

Analysis of the investments made through the LoCAL PBCCA grants reveals the following.

- Twenty-nine of the 38 investments (76 per cent) were directly CCA-related, 5 (13 per cent) were partially CCA-related, and 4 (11 per cent) were related to environmental conservation in general.
- The majority of the investments pertained to the improvement of water supply systems (for farming and household use – 24 per cent) and transport infrastructure (road, mule track and bridge – 21 per cent) for enhanced resilience against climate change impacts such as landslide, flash floods and surface erosion (Figure 3.1). This conforms with the findings of the environment, climate change and poverty vulnerability

FIGURE 3.1: Shares of LoCAL investments by type



assessments, which ranked water supply systems and transport infrastructure among the most climate-vulnerable livelihood assets in rural Bhutan.

- LoCAL investments ranged from BTN 50,000 to BTN 3,908,000. By far, the two biggest investments in terms of funds expended were the construction of an elevated Bailey bridge in Rameychen, Phobji Gewog, at a cost of BTN 3,908,000; and improvement of the Buli-Nimshong farm road in Nangkhor Gewog at a cost of BTN 3,145,000. These two activities accounted for about 38 per cent of the LoCAL funds. The large expenditure for these two activities was justified given the widespread significance they

TABLE 3.1: Implementation status of planned targets in LoCAL pilot phase in Bhutan, by outcome/output

| Outcome/output | Planned target | Achievement |
|--|---|---|
| Outcome: Increased resilience and adaptive capacity of local communities to climate change | | PBCCA grants have been used by four local governments to implement a wide range of activities relating to climate change adaptation (and mitigation). In all, 38 local government-level investments have been made to enhance the resilience and adaptive capacity of local communities for climate change. |
| Output 1: Effective and transparent CCA financing mechanism for local governments by establishing a PBCCA grant system | Performance assessment system and manual operationalized and baseline conducted for 2011/12 pilot local governments | PAM for local government public financial management and CCA performance developed. Based on the manual, a preliminary assessment of local government performance in the pilot <i>dzongkhags/gewogs</i> was carried out by an inter-agency team for disbursements made in FY 2011/12. |
| | Develop and implement a local government performance assessment system for PBCCA grants including baseline | Performance assessment system in place with the development and acceptance of the PAM for PBCCA grants. |
| | Develop and integrate an annex to the annual grant guidelines for accessing CCA grants by local governments | Annex on PBCCA grants developed and integrated into the annual grant guidelines. |
| | Capital CCA grant budget released from LoCAL to local governments | A total of BTN 19.247 million has been released as PBCCA grants to pilot <i>dzongkhags</i> and <i>gewogs</i> , and the grants fully utilized for the planned and budgeted activities, except for some minor changes in a couple of activities due to unforeseen circumstances (e.g. retreat of water source). |
| Output 2: Inclusive, effective and accountable CCA planning process designed and integrated in the local development planning process of <i>dzongkhags</i> and <i>gewogs</i> | Develop CCA output and activity planning process for local governments and integrate CCA planning as an annex in the annual grant guidelines for pilot local governments | This has been done as a part of the annex to the annual grant guidelines for accessing CCA grants. A separate financial code has been developed for PBCCA grants and integrated into the national budgeting system. |
| | Implement CCA planning process in pilot local governments in successive years, including CCA activity costing | Climate change vulnerability assessments have been carried out in the pilot local governments, leading to a menu of possible CCA investments to aid planning and costing at the local level. The CCA planning process was not carried over to successive years due to availability of LoCAL funds for only one FY (which spilled over to two FYs due to delayed release of the first tranche of funds). |
| | Support and monitor annual CCA plan implementation in pilot local governments | A preliminary assessment of the local government performance in pilot <i>dzongkhags/gewogs</i> was carried out by an inter-agency team. Local government public financial management performance monitored through in-house system. |
| | Integrate CCA annex in the Local Development Planning Manual and facilitate nation-wide application of the CCA planning process as part of integrated local development plans | CCA aspect integrated into the Local Development Planning Manual. However, local governments were unable to follow the process fully as the LoCAL programme started after completion of annual planning and budgeting. |

had for the overall development of local communities (see below and Annex 5 for more information).

Strategic analysis

Overall, the LoCAL activities were planned and implemented with a sound rationale in terms of CCA and community development benefits. Most of the LoCAL activities involved community-level investments and therefore had widespread community benefits. For example, improvement of rural water supply systems in Buli, Nangkhorgewog, benefitted 95 households. The elevated bailey bridge in Rameychen, Phobjikha Gewog, directly benefitted more than 100 farm households and over 150 schoolchildren who attended the Rameychen Primary School located above the left bank of the rivulet. The electrical stoves and rice cookers supplied to rural schools in Wangduephodrang complemented school-time meal schemes to encourage school attendance among rural children and reduce dependence on fuelwood.

A small proportion of the LoCAL programme funds involved household-level investments. Although the benefits of household-level investments such as bio-gas plants were limited to only a few families, it is presumed that such investments will provide visibility, encouraging other families to adopt similar interventions and triggering a multiplier effect¹.

A major technical issue was noted with regard to the supply of electric stoves to schools. From interactions with school staff, it was determined that the stoves (supplied by a Bhutanese manufacturer in Bumthang) were high in energy consumption, requiring two to three times more cooking time compared to fuelwood. There were also recurring maintenance problems. Other LoCAL activities had minor or no issues.

¹ Cost could, however, be an issue for a family in adopting the intervention without financial assistance/subsidy.

Annex 5 provides a brief description of and key issues associated with all the activities implemented with LoCAL PBCCA grants in the pilot *dzongkhags* and *gewogs*; Annex 6 provides funding information.

Gender analysis

The LoCAL activities were largely invested at the community level, encompassing all sections of rural society. There was no distinction made from a gender point of view. Nevertheless, it was noted that some of the investments would have greater benefits for women. Some key observations that can be made in this respect include the following.

- Investments in improvement of water supply systems (which made up 26 per cent of the LoCAL activities) should primarily benefit women as they are generally responsible for water collection, cooking and sanitation in rural households.
- Bio-gas plants also primarily benefit women, who generally are responsible for cooking in rural homes.
- Higher school attendance (indirectly due to the availability of electric stoves and rice cookers for school-time meals) would alleviate the burden on mothers in taking care of young children. Furthermore, schools have a significant role in the development of female children. In Bhutan, current statistics show that girls make up 49.9 per cent of the students in schools as of 2011².
- Crop diversification support in general would have more relevance for women than men. Agricultural farming, which is the largest employment sector, engages nearly 60 per cent of the national labour force – of which about 37 per cent are women, and about 23 per cent are men³.

² Statistical Yearbook of Bhutan 2012, National Statistics Bureau.

³ National Labour Force Survey Report 2012, Department of Employment, Ministry of Labour and Human Resources.

ADHERENCE TO MINIMUM CONDITIONS AND PERFORMANCE PARAMETERS

Minimum conditions

Minimum conditions were set for accessing the PBCCA grants; these were incorporated in the PAM for local government public financial management and CCA. The LoCAL programme based minimum conditions for PBCCA grants largely on the following existing minimum conditions set by the RGoB for local governments to access annual capital grants.

- Annual *dzongkhag/gewog* plans and budgets are to be in accordance with the assignment of the functional and financial responsibilities of the *dzongkhags* and *gewogs*, as endorsed by *dzongkhag tshogdus* (DTs) and *gewog tshogdes* (GTs) – i.e. the district councils and block committees. The format for the annual plan is to be in accordance with the Planning and Monitoring System developed by the GNHC Secretariat and the budget format of the Department of National Budget. Plans and budgets are to be submitted no later than 15 February.
- Monthly accounts are to be submitted as per the Ministry of Finance's fund release guidelines.
- The minutes of the DTs and the GTs related to annual plans are to be submitted to the GNHC Secretariat by the end of May.

The following additional minimum condition was incorporated:

- The local governments are to submit a detailed plan and budget on the expected use of the PBCCA grants to, respectively, the GNHC Secretariat with a copy to the DLG and the Ministry of Finance with a copy to the DLG by 15 February. The format for the annual plan will be provided by the

GNHC Planning and Monitoring System; the budget format will be provided by the Department of National Budget. The GT and DT minutes related to these plans are to be sent to the GNHC Secretariat and the DLG by the end of May. Due to the late start of the LoCAL programme, the deadline for these submissions was extended to the end of October 2012 for the use of the PBCCA grant in the first FY (2011/12). In future years, the deadline is as per the general planning process.

The minimum conditions set for the PBCCA grants have been **met to a large extent**. The activities proposed for the grants were in accordance with the functional and financial responsibilities of the *dzongkhags* and *gewogs*, and were deliberated on and endorsed by the respective DTs and GTs. However, the grants could not be planned and budgeted in line with the regular planning and budgeting cycle, as the LoCAL programme became operational after the FY 2011/12 cycle ended. In response to this issue, a climate change vulnerability assessment and CCA planning was undertaken in the pilot local governments with the assistance of a consultant. This resulted in an investment menu outlining a wide range of potential CCA activities that can be undertaken to address the climate change vulnerabilities identified through close engagement with local government officials. The LoCAL activities were identified primarily based on this investment menu. It was envisaged that in successive years, the PBCCA grants will be normalized into the annual planning and budgeting system for local governments. However, this could not be accomplished, as the grants were available only for one FY (2011/12) and were carried over to next FY (2012/13) due to the limited time available in the first FY for utilization of the funds as a result of their delayed release⁴.

⁴ The local governments received the funds in December 2013. By the time the funds were received by the implementers on the ground, another one or two months had elapsed.

The other minimum conditions pertaining to submission of monthly accounts as per the Ministry of Finance's fund release guidelines and the submission of GT and DT minutes related to annual plans to the GNHC Secretariat and the DLG were fulfilled. Documentary records of the monthly accounts and minutes of the GTs and DTs are maintained at the respective central agencies.

Performance measures outlined in the PAM

A manual is in place for the delivery of PBCCA grants. The PAM comprises two broad performance parameters, each given equal weight: one pertaining to public financial management and the other pertaining to CCA performance. The two parameters are further broken down into nine sub-parameters with a total of 44 performance areas.

The PAM is well-intentioned and has been designed to ensure high-quality investments and effective utilization of PBCCA grants by the local governments. **However, it is somewhat dense and contains some impracticable performance parameters for the local government level.** For instance, the PAM cites generation and compilation of data on climate change and the use of future climate scenarios. The capacity for compliance with this parameter does not exist at the national level, let alone the local government level, at this point in time.

Another issue pertains to the application of the Local Development Planning Manual. The manual is a work in progress and has not been fully rolled out as a mandatory planning process, although sensitization and training on its use have been delivered to local governments to promulgate it as the main planning tool for the 11th FYP. The manual outlines an intensive planning process that requires about a week of continuous engagement between local governments and their constituent local communities. Given the intensity of the community engagement

required by the Local Development Planning Manual, it is practicable for use every five years but not in annual planning as envisaged in the PAM. Furthermore, given that the PBCCA grants are to be small top-up investments to address CCA additionality at the local level, requirements such as environmental clearance and feasibility studies appear to be unnecessary.

LESSONS LEARNED AND GOOD PRACTICES

Several lessons and good practices can be drawn from the pilot phase of the LoCAL programme.

- The use of the participatory rural appraisal method for climate change vulnerability assessment and CCA planning was very relevant in rural circumstances, where the literacy level is generally low (adult literacy in rural Bhutan is 46.9 per cent, compared to 74.5 per cent in urban areas). Residents of rural communities, particularly those in the least developed *dzongkhags* like Zhemgang, are also very reticent. The use of visual tools (e.g. ranking and prioritization matrices with climate change vulnerabilities and livelihood resources denoted in pictures or symbols) has helped overcome communication constraints posed by low literacy and community reticence.
- Visual documentation of the pre-intervention situation is a very useful way of demonstrating the difference made by programme/project support. A case in point is Phobjikha Middle Secondary School, where the principal had pictures taken of the school premises before grass carpeting and footpath development were carried out through a PBCCA grant. These pictures clearly showed the significant improvements resulting from the support.

- The LoCAL programme was fitted into the JSP, to the benefit of both programmes. The JSP provided the overall programmatic vehicle, management set-up and strategic framework within which to operationalize the pilot LoCAL programme; and the LoCAL component complemented JSP objectives by presenting a tangible and meaningful approach for mainstreaming climate change through planning and fiscal mechanisms. Programmatic synergy was also pursued during implementation wherever such opportunities existed. For instance, assessments on climate change vulnerabilities and CCA planning as part of the LoCAL component and on environmental, climate change and poverty vulnerabilities and CCA capacity development needs of local governments through the JSP-Outcome 2 component were complementary in nature, and benefitted from each other in terms of methodology, approach and field work.
- The experience from the pilot phase shows that PBCCA grants cannot realize their potential and objectives based on a single-year intervention. For these grants to have a chance to work effectively and demonstrate their value as a climate change mainstreaming mechanism, they have to be tried over multiple years. The single-year intervention also did not give the LoCAL programme the opportunity to normalize the PBCCA grants into the local government annual planning and budgeting system in successive years after planning and funds were delayed in the first FY.

4 Conclusions and Recommendations

CONCLUSIONS

- The concept of PBCCA grants is of immense value to Bhutan. They are seen as contributing to environmental sustainability, equitable socio-economic development and good governance, which constitute three of the four GNH pillars¹. Because it is the poor who are the most vulnerable to climate change, the PBCCA grants have significance for poverty reduction, which Bhutan and its development partners share as an overarching development goal.
- Opportunities for, and the relevance of, PBCCA grants will be greater in the 11th FYP. The annual grants system for local governments, fiscal decentralization initiatives and the Local Development Planning Manual that were introduced in the 10th FYP are expected to be encouraged further in the 11th FYP. Furthermore, the enactment of the Local Governments Act in 2009 and subsequent promulgation of the Local Government Rules and Regulations in 2012 have established a comprehensive legal and procedural framework for empowerment of local governments in the new democratic political context.
- The pilot LoCAL programme, though brief in duration, has met almost all of the planned targets against the stated programme outcome and outputs. It now provides a sound conceptual and operational platform to strengthen and expand PBCCA grants.
- The minimum conditions have been largely fulfilled in accessing the PBCCA grants, with the exception of initial CCA planning and budgeting due to grant operationalization after annual planning and budgeting was already completed. The envisaged normalization of the PBCCA grants into the annual planning and budgeting cycle in successive years could not be realized as LoCAL funds were available only for one FY.
- The PAM, though well-intentioned in attempting to ensure high-quality investment and utilization of the PBCCA grants, is dense and contains some impracticable performance parameters. Consequently, it has not been fully used.
- Despite grants not being able to meet a number of the requirements in the PAM, the overall quality of utilization of PBCCA grants was good, with many showing discernible benefits in terms of CCA and community development.

RECOMMENDATIONS

- The PBCCA grants need to be continued and taken into a next phase with a multiple-year time frame to provide the mechanism sufficient scope to realize its potential of demonstrating how CCA additionality can be mainstreamed through performance-based planning and fiscal measures.
- The first year of the next phase should be devoted to strengthening the PBCCA grant system and preparing for its

¹ The fourth is preservation and promotion of culture.

operationalization at the local government level through the following activities:

- Review and revise the PAM, focusing on making the CCA performance assessment parameters practicable. For the local government public financial management performance assessment, the DLG, the GNHC Secretariat and the Ministry of Finance could rely on an in-house system to provide performance information. The review and revision of the PAM should occur in close consultation with key stakeholders in the DLG, the GNHC Secretariat, the Ministry of Finance and the local governments. The drafts should be subjected to peer review.
- Sensitize relevant central government agencies and local governments on CCA and PBCCA grants. This would include development of advocacy materials and a few stakeholder workshops.
- Develop a participatory rural appraisal toolkit for climate change vulnerability assessment to aid local-level CCA planning with a perspective of three to five years, and train *gewog* administrative officers and renewable natural resources extension staff on the use of this toolkit. This will entail honing the participatory rural appraisal method used in the pilot phase and customizing it for gender-sensitive and pro-poor outcomes.
- Support selected local governments in carrying out a climate change vulnerability assessment and CCA planning using the participatory rural appraisal toolkit.
- Integrate the results of the climate change vulnerability assessment and CCA planning into the regular local government planning and budgeting system on an annual basis.
- Roll out the revamped PBCCA grants system to new local governments, giving priority to the poorest *gewogs* (the 13 *gewogs* in the 6 poorest *dzongkhags*) based on the premise that the poor are most vulnerable to climate change impacts and in keeping with the concept and approach of targeted poverty reduction interventions envisaged in the 10th and 11th FYPs.
- Focus the PBCCA grants on *gewogs* with the role of *dzongkhag* administrations limited to planning support and monitoring and evaluation, including annual performance assessment of the grants.
- The DLG's role needs to remain pivotal in terms of overall guidance, coordination, capacity development support and monitoring of the overall PBCCA grants system. It could also play a pro-active role in knowledge management, which is vital for the innovation and potential lessons the PBCCA grants system brings to the country.
- Prioritize investments for PBCCA grants so they are not thinly spread over too many activities. Make implementation of the prioritization process as outlined in the Local Development Planning Manual, climate change vulnerability assessments and CCA planning mandatory for PBCCA grants.
- Ensure that the performance of PBCCA grants can be assessed accurately, and that the PBCCA mechanism is able to deliver intended results, by aligning the grants with the annual planning and budgeting time frame from the outset.
- Maintain an emphasis on community-level investments but ensure sufficient flexibility to accommodate household-level investments where there is a strong rationale and potential for such investments catalysing larger changes for CCA at the community level. In such cases, well-defined criteria need to be developed and followed in selecting households for investment to ensure transparency and minimize the likelihood of community discontent and stress.

Annexes

ANNEX 1: TERMS OF REFERENCE

Background to the consultancy

The United Nations Capital Development Fund (UNCDF) has provided support to the Bhutanese government in decentralization and local governance since 1997. Under the current Local Governance Support Programme (LGSP) in Bhutan supporting local governments with regard to annual capital grants and capacity development, UNCDF explored the possibility with the government and development partners in 2009 of harmonizing development assistance on climate change at local levels in accordance with the Joint Support Programme (JSP), to ensure maximum donor coordination and alignment of donor assistance to the Royal Government of Bhutan's policies and procedures. UNCDF supported the component on the climate change adaptation intervention to look at opportunities to strengthen and build on the existing local governance platform supported through the LGSP to improve public service delivery and linked under the JSP framework.

From 2011, a new facility – the Local Climate Adaptive Living Facility (LoCAL) – was added to the ongoing support, but closely aligned and mainstreamed with the existing support programmes. LoCAL was designed as an integrated component under the JSP and started piloting the linkage between climate change funding, capacity-building support and incentives in the rural local governments in Bhutan. Scoping and review of this initiative started in 2010, and the pilot started under the LoCAL initiative as a component of the JSP in 2011. It has covered two *gewogs* and two *dzongkhags* with climate change resilience grants as a top-up of the general annual grant, providing performance assessments and capacity-building support. Climate change-relevant capacity-building support

has been rendered under the JSP/Sustainable Environment Support Programme, including support to capacity-building grants, also covering the LoCAL pilot local governments.

The experiences so far have been fruitful, and there is now a strong motivation to expand the experience in scope and depth in the coming years. Building on these experiences, the initiative to roll out the LoCAL project to other local government and urban authorities has been initially discussed by UNCDF, the government and other stakeholders that are expected to be covered by future support from the LGSP/JSP.

There is, however, a need for a final assessment of the experiences of the first years of LoCAL operations, including a review of the necessary reforms to be initiated in the process, to define the scope of the next phase of LoCAL support.

Objective

This final assessment will determine the extent of the effectiveness and efficiency of the project in achieving results and the possibility for next phase allocations of the LoCAL performance-based climate resilience grant (PBCRG) to local governments under the Local Governance Sustainable Development Programme (LGSDP). The grant component of the LGSDP under LoCAL will be aligned to the national planning and budgeting process and will be implemented in the government's 2014/15 fiscal year.

The findings will be incorporated to inform the LGSDP on possible options for future LoCAL roll-out.

Scope of the assignment

The assessment will be conducted by a national consultant with some support from an international consultant. As the mission is limited in scope and timing, it will focus on a few core issues:

- Review and assess LoCAL/PBCRG disbursements to local governments and their capacities to plan, budget and implement activities for climate change adaptation in the pilot sites
- Review the selection process for projects/ activities funded by LoCAL
- Review the procurement process of the local government projects funded by LoCAL
- Review the effectiveness of implementation of the local government projects funded by LoCAL
- Review the understanding and use of the Performance Assessment Manual to assess the pilot local governments' improvement of their administrative and financial capacities
- Assess local governments' understanding of climate change adaptation and integrated planning in their local development plans and programmes
- Review options for roll-out of LoCAL in the next phase, based on lessons learned on the grant ceiling
- Outline future activities and design the work necessary to prepare for the next phase of the PBCRG to be aligned to the LGSDP
- Review and assess the extent to which participating local governments have meet the PBCRG minimum conditions in implementing LoCAL and performance on the defined performance measures
- Review the extent to which LoCAL and the performance-based fund allocations have created awareness of climate change in the four pilot local governments
- Visit the LoCAL field sites

The international consultant, with an input of five days, will support implementation of the LoCAL final assessment as follows:

- Together with the national consultant, develop a methodology for assessment of the minimum conditions and performance measures
- Provide comments on the assessment of minimum conditions and performance measures findings and on the draft final assessment report from the national consultant

The LoCAL National Programme Manager and the UNCDF Programme Associate will accompany the consultant on the mission and will provide support in the following areas:

- Provide input to the assessment report on substantive issues and support the interview and questionnaire sessions with local governments
- Assist the field mission in translation and facilitation of meetings, and provide technical input at the local programming level
- Provide overall support and coordination in mission appointments with the government and relevant partners at the district and block levels
- Contribute to the final report where required regarding budgets and information as advised by the consultant

As part of the assessment mission team, the transportation and logistic costs of the LoCAL National Programme Manager and the UNCDF Programme Associate will be covered by the LoCAL project under the monitoring and evaluation budget line.

The consultant will work in close coordination with and with guidance from the LoCAL National Programme Manager and UNCDF country staff.

The assessment team will undertake field visits to review and assess LoCAL implementation in participating local governments. As part of the assessment, the consultant will determine to what extent each local government has met the minimum conditions and its capacity to make progress on the performance measures, as part of the LoCAL methodology in delivering the PBCRG.

The team will meet with relevant stakeholders at the national and local levels. They will also visit the LoCAL field sites.

Based on the mission's findings and analysis, the consultant will develop an assessment report and a brief note and recommendation on future LoCAL roll-out.

Deliverables and timeline

The national consultant will have a total of 30 days for the assignment, including 16 days for field visits and 5 days for preparation, with the remaining days to be used for report finalization in consultation with the UNCDF Regional Programme Manager. The mission will begin in September 2013.

The outputs will consist of the following:

- Draft assessment report, covering the issues mentioned in the scope of work (for LoCAL management review)
- Final assessment report incorporating comments to the report including recommendations

Mission expertise and qualifications

The assessment will be conducted by the national consultant with technical experts knowledgeable about local government in Bhutan and climate change adaptation at the local level; expertise in developing and identifying local government climate financing possibilities; and experience in engaging with and building the capacity of key stakeholders.

The national consultant will be supported by a UNCDF retainer consultant with expertise in the areas of public administration, decentralization and local governance reforms in developing countries, with a specific emphasis on local-level public financial management especially regarding the performance-based grant system.

ANNEX 2: DOCUMENTS REVIEWED

- Annual Dzongkhag Statistics 2012, Wangduephodrang Dzongkhag
- Annual Dzongkhag Statistics 2012, Zhemgang Dzongkhag
- Annual Grant Guidelines for Local Governments, April 2010, GNHC Secretariat
- Assessment of Environment, Climate Change and Poverty Vulnerabilities and Identification of Adaptation Responses and Capacity Development Needs of the Local Governments, December 2011, JSP, DLG, Ministry of Home and Cultural Affairs
- Eleventh Five-Year Plan Volume 1: Main Document, October 2013, GNHC Secretariat
- Eleventh Five-Year Plan Volume 2: Programme Profiles, October 2013, GNHC Secretariat
- End of Programme Evaluation of the Local Governance Support Programme, draft report, July 2013, Research and Evaluation Division, GNHC Secretariat, and Representative Office of Denmark
- Joint Support Programme on Capacity Development for Mainstreaming Environment, Climate Change and Poverty Concerns in Policies, Plans and Programs, Programme Document, November 2009, RGoB
- LoCAL Assessment Report, June 2012, DLG, Ministry of Home and Cultural Affairs
- LoCAL Bhutan Country Programme, Project Document, May 2011
- LoCAL Bhutan Scoping Mission Report, July 2010, Local Governance Support Programme, RGoB and United Nations Capital Development Fund
- LoCAL Phase 1, Global Project Document, May 2011
- Local Governance Sustainable Development Programme, Programme Document, October 2013, RGoB
- Minutes of Programme Management Group Meetings of the Joint Support Programme: 6th PMG Meeting (30 December 2010), 7th PMG Meeting (21 March 2011), 8th PMG Meeting (15 August 2011), 9th PMG Meeting (22 September 2011), 10th PMG Meeting (31 January 2012), 11th PMG Meeting (2 July 2012), 12th PMG Meeting (November 2012), and 13th PMG Meeting (25 February 2013)
- Minutes of Programme Steering Committee Meetings of the Joint Support Programme: 3rd PSC Meeting (4 April 2011), 4th PSC Meeting (30 September 2011), 5th PSC Meeting (7 March 2012), 6th PSC Meeting (20 September 2012), and 7th PSC Meeting (7 March 2013)
- National Labour Force Survey Report 2012, Department of Employment, Ministry of Labour and Human Resources
- Performance Assessment Manual on Local Government Public Financial Management and Climate Change Adaptation, September 2011, JSP LoCAL Component and Local Governance Support Programme, DLG, Ministry of Home and Cultural Affairs, and GNHC
- Statistical Yearbook of Bhutan 2012, National Statistics Bureau, RGoB

ANNEX 3: PEOPLE INTERVIEWED

Thimphu

Dorji Dhrap, Deputy Chief Finance Officer,
Department of Public Accounts, Ministry of
Finance

Jigme Wangda, Assistant Accounts Officer,
Department of Public Accounts, Ministry of
Finance

Tshering Tashi, Assistant Environment Officer,
National Environment Commission Secretariat

Melam Zangpo, Senior Programme Officer/
LoCAL National Programme Manager, DLG,
Ministry of Home and Cultural Affairs

Tshering Yanki, Programme Associate, UNCDF/
UNDP Bhutan

Wangduephodrang Dzongkhag

Dasho Lhendup R. Wangchuk, Dzongdag

Dasho Bap Pema, Dzongrab

Pema Wangchuk S., Assistant Dzongkhag
Education Officer

Sahadev Thapa, Dzongkhag Planning Officer

Kul B. Gurung, Dzongkhag Livestock Officer

Yeshey Tshering, Assistant Accounts Officer

Tshering Penjor

Tashi Gyeltshen, Executive Engineer

Lhapchu, Dzongkhag Engineer

Tshering Tobgay, Dzongkhag Agriculture
Officer

Sonam Norbu, Dzongkhag Forestry Extension
Officer

Gyeltshen, Assistant Planning Officer

Kesang Wangyel, Principal, Nobding Lower
Secondary School

Dorji Wangchuk, Vice Principal, Nobding Lower
Secondary School

Aita Singh Subba, School Cook, Nobding Lower
Secondary School

Phub Jamtsho, Gaydrung, Daga Gewog

Singye Om, Farmer, Uma Khatoe, Daga Gewog

Jambay, Farmer, Uma Khatoe, Daga Gewog

Ugyen Penjor, Farmer, Lumphaka, Bjena Gewog

Phobji Gewog

Jamtsho, Gup

Sati, Khemdro Tshogpa

Passang, Tawa Tshogpa

Thinley Wangchuk, Assistant Engineer

Ngawang Choeda, Gewog Administrative
Officer

L.B. Thapa, Principal, Phobjikha Middle
Secondary School

Ugyen Phuntsho, Principal, Rameychen Primary
School

Gyem Phub, Doktsel Tshogpa

Sonam Wangmo, Farmer, Doktsel

Zhemgang Dzongkhag

Dasho Mani Sangye, Dzongrab

Tshewang Rinzin, Dzongkhag Statistics Officer

Samdrup Dagay, Accounts Officer

Prem Lal Sharma, Extension Agent, Dzongkhag
Agriculture Sector

Sonam Dhendup, Dzongkhag Livestock Officer

Tashi Dhendup, Deputy Dzongkhag Forestry
Extension Officer

Tshering Dhendup, Engineer, Dzongkhag
Engineering Sector

Tshewang Samten, Budget Officer

Phub Dorji, Dzongkhag Administrative Officer

Sonam, Farmer, Dangkhar, Trong Gewog

Thinley Namgyal, Farmer, Dangkhar, Trong
Gewog

Lam Khandu, Local Priest, Tharpachhoeling
Tama Goempa, Tama, Trong Gewog

Napen, Resident, Tama, Trong Gewog

Nangkor Gewog

Dorji Wangchuk, Gup

Lham Gyeltshen, Mangmi

Kinley Wangchuk, Buli Tshogpa

Sonam Tobgay, Gewog Forestry Extension
Officer, Upper Nangkor Gewog Renewable
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Bonning, Forester, Buli Forest Beat Office

Sangay Shendup, In-charge, Community
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Others

Fakri Karim, Programme Manager, UNCDF LoCAL
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Kinley Wangdi, former Gewog Administrative
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Participants at debriefing, 25 November 2013

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ANNEX 4: **WORKSHOP AGENDA**

Introductory session: Presentations (20 minutes)

- Overview of LoCAL and its strategic framework
- Introduction to workshop objectives, approach and methodology

Focus Group Discussion 1: Implementing PBCCA grant (approx. 45 minutes)

- What activities did you plan/select and implement using the PBCCA grant, and what criteria influenced the selection of these activities?
- What tools (guidelines, manual, etc.) were available to you for planning, budgeting and monitoring activities supported by the PBCCA grant?
- How effectively were you able to use these tools?
- What training support did you receive to plan and budget activities for the PBCCA grant? How effectively were you able to use the knowledge and skills derived from such support?

Focus Group Discussion 2: Opportunities and challenges (approx. 45 minutes)

- What benefits did you and your organization derive from the LoCAL/PBCCA grant particularly in terms of planning and budgeting, awareness of climate change issues, and addressing climate change adaptation needs of the local communities?
- What were the major challenges you faced in planning and implementing activities using PBCCA grants? *These challenges may be systemic (e.g. lack of policy or flawed procurement system/procedures), organizational (e.g. lack of coordination between sectors or lack of data/information), and/or individual (e.g. lack of knowledge and skills).*

Focus Group Discussion 3: The way forward (approx. 45 minutes)

- What success story/best practice cases do you have from implementation of the LoCAL/PBCCA grant?
- How do you think the good work can be taken forward? What role can you play and what role can others (name them) play in this?
- How can the various challenges you mentioned in the previous focus group discussion be alleviated? What role can you play and what role can others (name them) play in this?

Wrap-up: Summation of the results of the workshop (10 minutes)

ANNEX 5: OVERVIEW OF LoCAL ACTIVITIES

| No. | Activity | Rationale/brief description | Issues |
|------------------------|--|--|--|
| Wangduephodrang | | | |
| 1 | Installation of bio-digesters in the gewog renewable natural resources centres of Bjena, Gasetsho-gom, Kaghi, Phangyul and Rubeisa | Demonstrate to farmers how crop and animal waste can be recycled to produce organic effluents for use in soil fertility management and organic farming | No demonstration training on bio-digester has been conducted/ planned so far. Prolonged non-utilization may lead to misuse and dilapidation. |
| 2 | Support for potato seed production to Nakha Samdrup Tshongley Detshen in Nakha Village, Sephu Gewog | Provide high-altitude community of Nakha Village with an alternative income-generating activity, as the traditional livelihood of yak herding was being affected by reduced productivity of pastures due to reduced precipitation in winters | The land identified for community potato seed production belongs to the government. Land lease application has been submitted to the National Land Commission, but approval is pending and may take time. |
| 3 | Installation of bio-gas plants in five rural homes in Athang and Daga Gewogs | Bio-gas plants were installed to reduce dependency on fossil fuel and as an alternative to electricity, which is affected in winter by inadequate river flows as a result of reduced precipitation; intervention also promotes stall feeding, reducing grazing pressure on natural forests | Where interventions can be directed towards only a few households, well-defined criteria and transparency need to be set regarding the selection of households for support. In the absence of such criteria and transparency, there may be risk of discontent and strain in the community. |
| 4 | Construction of a bailey bridge over Likcheychhu and associated river training works in Rameychen Village, Phobji Gewog | Elevated bailey bridge constructed to replace a semi-permanent wooden bridge that had been in place for over 25 years, but which had suffered significant wear and tear in response to increased rainfall during monsoons over recent years, necessitating frequent replacement of beams and planks; new bridge is 2 m higher than old to accommodate water level rise | Project accounted for more than 20 per cent of the LoCAL PBCCA grants utilized by the pilot local governments. |
| 5 | Grass carpeting and footpath development in Phobjikha Middle Secondary School, Gangte Gewog | Relieve soil erosion and muck exacerbated by persistent monsoon rains on grounds of newly constructed school that had been re-located to protect black-necked crane habitat | |

| No. | Activity | Rationale/brief description | Issues |
|---------------------------|--|---|--|
| 6 | Promotion of asparagus and citrus production in Bjena, Daga and Rubeisa Gewogs | Original plan was to promote bharlang, a drought-resistant variety of cardamom. However, the Ministry of Agriculture and Forests advised against this, as bharlang has a high disease risk. The local governments decided to promote asparagus and citrus to diversify crop production and wean farmers from excessive dependency on climate-sensitive crops such as paddy. | |
| 7 | Provision of electric stoves, rice cookers and water boilers to schools | Electric cooking appliances were provided to eight schools with boarding and school-time meal facilities to reduce fuelwood consumption and carbon emissions, and provide hygienic cooking conditions. Three schools visited during the assessment reported that their fuelwood consumption had been reduced by half. | The electric stoves, which were supplied by a Bhutanese manufacturer based in Bumthang, are high on energy consumption, requiring 2–3 times more cooking time than fuelwood, and have recurrent maintenance issue. Also the erratic supply of electricity in many parts of rural Bhutan impedes the utility of electric appliances. Rice cookers were reportedly far more energy-efficient and had few maintenance issues. |
| 8 | Rehabilitation of water reservoir at Shingkhey Village, Gasetsho-wom Gewog | CCA activity responding to increasing water scarcity | The activity was eventually dropped, as local government officials found that the water source had retreated significantly and that it was no longer feasible to carry out the activity within budget due to the uncertainty of water availability. |
| Phobji Gewog | | | |
| 9 | Vegetable trials of improved varieties | Promote crop diversification, including trial of varieties with low sensitivity to climate change | |
| 10 | L-shaped portland cement concrete drainage along Nemphey-Taphu farm road | Install drainage along a vulnerable 1.5-km stretch of the 10-km Nemphey-Taphu farm road to reduce surface erosion and muddiness caused by rains. The road benefits some 200 households as well as tourists and provides access to Rameychen Primary School and a number of cultural monuments. The activity is a good example of the use of the community contracting protocol. | |
| Zhemgang Dzongkhag | | | |
| 11 | Improvement of Buli-Nimshong farm road | Improve drainage and slope stability for enhanced resilience against intense rainfall of 30-km road connecting to vital access feeder road for rural communities of Nangkhor, Shingkhari and Bardo Gewogs (collective population: 6,070); PBCCA grant was used to supplement RGoB budget of BTN 4 million | This investment accounted for more than 16 percent of the LoCAL funds utilized for PBCCA grants by local governments. |

| No. | Activity | Rationale/brief description | Issues |
|-----|---|--|--|
| 12 | Improvement of Dangkhar farm road, Trong Gewog | Improve soling and drainage of 2-km farm road connecting Dangkhar Village to town of Zhemgang, which directly benefits 18 households and indirectly benefits another 36 households. Previously, the road was not frequently pliable during the monsoon. Interviews with local beneficiaries suggested that the road has now become pliable all year round. It also provides access to community tourist lodges, which have been established and are run by the local community as a part of a community-based tourism initiative supported by the Association of Bhutanese Tour Operators. | |
| 13 | Installation of bio-gas plants in Sonam Thang, Thinleygang, Marangdudh and Tungku Denpa under Panbang <i>Dungkhag</i> | Bio-gas plants were installed at the household level to reduce dependency on fossil fuel and as an alternative to electricity, which is affected in winter by inadequate river flows as a result of reduced precipitation; intervention also promotes stall feeding, reducing grazing pressure on natural forests | Where interventions can be directed towards only a few households, well-defined criteria and transparency need to be set regarding the selection of households for support. In the absence of such criteria and transparency, there may be risk of discontent and strain in the community. |
| 14 | Provision of grass choppers to the gewog renewable natural resources centres of Bardo, Bjoka, Goshing, Nangkhor, Ngangla, Phangkhar, Shingkhar, and Trong | Promote production of winter fodder; the strategy is to maintain the choppers at the gewog renewable natural resources centres and hire them out to interested farmers as and when required | Community willingness to hire grass choppers is unclear. |
| 15 | Provision of fodder seeds to farmers in Trong Gewog for fodder development | Promote stall feeding, thereby reducing grazing pressure on forests and risk of livestock depredation by wildlife | |
| 16 | Establishment of forest nursery in Ngangla Gewog to support re-afforestation activities in Lower Kheng | Response to lack of a forest nursery in the sub-tropical area of Zhemgang, where past forest-planting activities have relied on the forest nursery in Trong, which mainly had temperate species unsuitable for planting in sub-tropical areas | |
| 17 | Supply of solar lamps to non-formal education centres | 72 sets of solar lamps each were supplied to 35 non-formal education centres as an alternative to electricity, which is erratic particularly in winter due to inadequate river flows as a result of reduced precipitation. The centres conduct adult literacy classes for rural residents. | |

| No. | Activity | Rationale/brief description | Issues |
|-----|---|---|---|
| 18 | Protection of community water source at Pantang (Phangkhar Gewog), Wamling and Nimshong (Shingkhar Gewog) | Rehabilitate key community water sources damaged by flash flood and carry out mitigation measures to reduce risk of climate-induced damages in the future; rehabilitated water sources benefit some 60 households | |
| 19 | Climate change vulnerability study | <i>Dzongkhag</i> forestry sector to conduct a study on the existing and potential impacts of climate change and ongoing logging operations in the water catchment area encompassing Tali, Kikhar and Goling settlements | Field work has been completed, but there has been delay in finalizing the report due to time constraint for data analysis and report writing. |
| 20 | Renovation of irrigation channel at Khomshar, Phirthigang and Phulabi in Bardo Gewog | Improve >1 km of irrigation channel for better resilience against climate impacts; 111 households stand to benefit from the investment | |
| 21 | Renovation of mule track at Cherchela, Bardo Gewog | Improve ~0.5 km of mule track for better resilience against heavy rainfall; this benefits the <i>chiwogs</i> of Khomsar, Langdurbi, Phulabi and Digala with a combined population of 242 households | |
| 22 | Strengthening of retaining wall to protect Bjoka Gewog administration office | ~91 m ² retaining wall constructed to protect the <i>gewog</i> administration office from collapsing due to slope instability caused by heavy rainfall. The <i>gewog</i> office serves 5 <i>chiwogs</i> with a combined population of 949. | |
| 23 | Renovation of Gangdar-Redigang and Dalabi-Wamphu mule tracks in Bjoka Gewog | Improve ~2 km of mule track for better resilience against heavy rainfall, benefitting 71 households in the Kamati and Bjoka Trong <i>chiwogs</i> | |
| 24 | Planting of fruit-bearing trees at Goshing Basic Health Unit and Budhashi Community Primary School in Goshing Gewog | Improve landscaping, provide some protection from the sun, and reduce soil erosion in and around the premises of the basic health unit and the school | |
| 25 | Formation of non-timber forest product groups in six communities in Ngangla Gewog | Promote alternative income generation through sustainable use and management of locally grown non-timber forest products such as bamboo shoot, cane, mushroom, <i>pipla</i> , <i>aru</i> and <i>baru</i> in order to diversify livelihood base in view of climate change impacts on primary livelihoods such as agriculture | |

| No. | Activity | Rationale/brief description | Issues |
|-----------------------|---|---|---|
| 26 | Supply of solar batteries to households in Gujong, Pongchula, Ridijong, Tradijong and Chapgoen communities, Phangkhar Gewog | Solar batteries were supplied to 48 households to promote use of solar energy as an alternative to electricity, which is erratic particularly in winter due to inadequate river flows as a result of reduced precipitation. Solar panels and controllers were already available to the target households. | |
| 27 | Water source protection and enrichment planting in Phangkhar Gewog | Enhance community water source through enrichment planting and protection against grazing and felling of vegetation | |
| 28 | Construction of water supply system for Shingkhar Gewog renewable natural resources centre | Provide a climate-resilient water supply system and improve availability of water for staff of the renewable natural resources centre and their families | |
| 29 | Renovation of irrigation channel at Shingkhar | Improve and protect 1.2 km of irrigation channel benefitting 20 households against climate impacts | |
| 30 | Wind-resilient roofing and improved internal electric wiring of Gomphu, Tama and Zurphey <i>lhakhangs</i> | Replace wind-damaged roofs with new wind-resilient roofing structures and improve internal electric wiring to reduce fire hazards, which are a particular risk during the dry winter season; the <i>lhakhangs</i> serve some 165 households for spiritual/religious activities | |
| Nangkhor Gewog | | | |
| 31 | Establishment of community forestry group in Goling | Training provided to community forestry group to sensitize them on community forestry rules and regulations, and community forestry management plan. Upon approval by the government, the community forest will benefit 65 households. | The community forestry management plan is yet to be approved by the Ministry of Agriculture and Forests, which has begun to take a cautious approach following reports of misuse of community forests by some local communities. |
| 32 | Improvement of Zhobling farm road | Improve soling and drainage of 6.5-km farm road which diverges from the main Goling farm road to provide access to nine households in Zhobling | Almost the entire stretch of the road needs improvement in drainage and soling. The improvement attempted with the PBCCA grant was apparently piecemeal and too limited to make a difference in road quality. In addition, the limited number of beneficiaries makes the investment's utility questionable. |
| 33 | Improvement of irrigation channel at Goling | Improve and protect irrigation channel benefitting some 25 households against climate impacts; also involved rehabilitation work at the water source | |
| 34 | Improvement of irrigation channel at Kikhar | Improve and protect irrigation channel benefitting 44 households against climate impacts | |

| No. | Activity | Rationale/brief description | Issues |
|-----|---|--|---|
| 35 | Enhancement of the rural water supply scheme at Buli | Enhance water storage capacity to sufficiently serve 95 local households, families of government staff and Buli Middle Secondary School; previous water storage tank was built when local population comprised about 55 households | Water shortage was induced by insufficient water storage capacity for a population that has almost doubled since the supply system was first built, and not by climate change. According to local community accounts, water at the source has remained abundant over the years. |
| 36 | Awareness of new human diseases | Sensitize local communities about potential health risks resulting from climate change and basic measures that can be taken to mitigate these risks | |
| 37 | Bamboo planting in landslide-prone areas in Dunmang and hedge row planting in Kamjong | Rehabilitate and protect vulnerable areas against landslides and soil erosion | |
| 38 | Widening of Kamjong-Tshachugang mule track | Previous mule track was too narrow and posed risk of accidents for humans as well as livestock particularly during rainy season. Around 3 km of the mule track was widened to reduce risk. The track benefits 57 households. | |

ANNEX 6: FUNDING OF LOCAL ACTIVITIES

| No. | Activity | 1st tranche | | 2nd tranche | | | | Total | |
|----------|--|--------------------|------------------|-----------------------------|--------------|--------------|------------------|---------------|------------------|
| | | Release/ budget | Expend- iture | Bal. from 1st tranche | Budget | Release | Expend- iture | Release | Expend- iture |
| A | Wangduephodrang | 4.530 | 1.728 | 2.802 | 2.522 | 5.324 | 4.929 | 7.052 | 6.657 |
| A1 | Installation of bio-digesters in the gewog renewable natural resources centres of Bjena, Gasetsho-gom, Kaghi, Phangyul and Rubeisa | 0.200 | 0.200 | 0.000 | 0.000 | 0.000 | 0.000 | 0.200 | 0.200 |
| A2 | Support for potato seed production to Nakha Samdrup Tshongley Detshen in Nakha village, Sephu Gewog | 0.450 | 0.000 | 0.450 | 0.000 | 0.450 | 0.433 | 0.450 | 0.433 |
| A3 | Installation of bio-gas plants in five rural homes in Athang and Daga Gewogs | 0.200 | 0.151 | 0.049 | 0.000 | 0.049 | 0.038 | 0.200 | 0.189 |
| A4 | Construction of a bailey bridge over Likcheychhu and associated river training works in Rameychen Village, Phobji Gewog | 2.000 | 0.000 | 2.000 | 2.000 | 4.000 | 3.908 | 4.000 | 3.908 |
| A5 | Grass carpeting and footpath development in Phobjikha Middle Secondary School, Gangte Gewog | 0.450 | 0.450 | 0.000 | 0.000 | 0.000 | 0.000 | 0.450 | 0.450 |
| A6 | Promotion of asparagus and citrus production in Bjena, Daga, and Rubeisa Gewogs | 0.230 | 0.230 | 0.000 | 0.000 | 0.000 | 0.000 | 0.230 | 0.230 |
| A7 | Provision of electric stoves, rice cookers and water boilers to schools | 0.500 | 0.201 | 0.299 | 0.322 | 0.621 | 0.550 | 0.822 | 0.751 |
| A8 | Rehabilitation of water reservoir at Shingkey village in Gasetsho-wom Gewog ^a | 0.500 | 0.496 | 0.004 | 0.200 | 0.204 | 0.000 | 0.700 | 0.496 |
| B | Phobji Gewog | 0.550 | 0.096 | 0.454 | 0.095 | 0.545 | 0.450 | 0.645 | 0.546 |
| B1 | Vegetable trials of improved varieties | 0.100 | 0.096 | 0.004 | 0.000 | 0.000 | 0.000 | 0.100 | 0.096 |
| B2 | L-shaped portland cement concrete drainage along Nenphey-Taphu farm road | 0.450 | 0.000 | 0.450 | 0.095 | 0.545 | 0.450 | 0.545 | 0.450 |
| C | Zhemgang | 6.858 | 4.498 | 2.360 | 3.442 | 5.746 | 5.704 | 10.300 | 10.202 |
| C1 | Improvement of Buli-Nimshong farm road | 2.000 | 0.628 | 1.372 | 1.145 | 2.517 | 2.517 | 3.145 | 3.145 |
| C2 | Improvement of Dangkhar farm road, Trong Gewog | 0.500 | 0.476 | 0.024 | 0.000 | 0.000 | 0.000 | 0.500 | 0.476 |

| No. | Activity | 1st tranche | | 2nd tranche | | | | Total | |
|-----|--|--------------------|------------------|-----------------------------|--------|---------|------------------|---------|------------------|
| | | Release/ budget | Expend- iture | Bal. from 1st tranche | Budget | Release | Expend- iture | Release | Expend- iture |
| C3 | Installation of bio-gas plants in Sonam Thang, Thinleygang, Marangdudh and Tungku Denpa under Panbang Dungkhag | 0.150 | 0.000 | 0.150 | 0.000 | 0.150 | 0.150 | 0.150 | 0.150 |
| C4 | Provision of grass choppers to the gewog renewable natural resources centres of Bardo, Bjoka, Goshing, Nangkhor, Ngangla, Phangkhar, Shingkar, and Trong | 0.080 | 0.073 | 0.007 | 0.000 | 0.000 | 0.000 | 0.080 | 0.073 |
| C5 | Provision of fodder seeds to farmers in Trong Gewog for fodder development | 0.050 | 0.050 | 0.000 | 0.000 | 0.000 | 0.000 | 0.050 | 0.050 |
| C6 | Establishment of forest nursery in Ngangla Gewog to support re-afforestation activities in Lower Kheng | 0.300 | 0.000 | 0.300 | 0.000 | 0.300 | 0.300 | 0.300 | 0.300 |
| C7 | Supply of solar lamps to non-formal education centres | 0.450 | 0.450 | 0.000 | 0.000 | 0.000 | 0.000 | 0.450 | 0.450 |
| C8 | Protection of community water source at Pantang (Phangkhar Gewog), Wamling and Nimshong (Shingkar Gewog) | 0.528 | 0.192 | 0.336 | 0.400 | 0.736 | 0.694 | 0.928 | 0.886 |
| C9 | Climate change vulnerability study | 0.000 | 0.000 | 0.000 | 0.747 | 0.747 | 0.747 | 0.747 | 0.747 |
| C10 | Renovation of irrigation channel at Khomshar, Phirthigang, and Phulabi in Bardo Gewog | 0.550 | 0.550 | 0.000 | 0.000 | 0.000 | 0.000 | 0.550 | 0.550 |
| C11 | Renovation of mule track at Charchela, Bardo Gewog | 0.100 | 0.100 | 0.000 | 0.000 | 0.000 | 0.000 | 0.100 | 0.100 |
| C12 | Strengthening of retaining wall to protect Bjoka Gewog administration office | 0.300 | 0.300 | 0.000 | 0.000 | 0.000 | 0.000 | 0.300 | 0.300 |
| C13 | Renovation of Gangdar-Redigang and Dalabi-Wamphu mule tracks in Bjoka Gewog | 0.200 | 0.200 | 0.000 | 0.000 | 0.000 | 0.000 | 0.200 | 0.200 |
| C14 | Planting of fruit-bearing trees at Goshing Basic Health Unit and Budhashi Community Primary School in Goshing Gewog | 0.050 | 0.050 | 0.000 | 0.000 | 0.000 | 0.000 | 0.050 | 0.050 |
| C15 | Formation of non-timber forest product groups in six communities in Ngangla Gewog | 0.100 | 0.075 | 0.025 | 0.000 | 0.000 | 0.000 | 0.100 | 0.075 |

| No. | Activity | 1st tranche | | 2nd tranche | | | | Total | |
|--|---|--------------------|------------------|-----------------------------|--------------|---------------|------------------|---------------|------------------|
| | | Release/ budget | Expend- iture | Bal. from 1st tranche | Budget | Release | Expend- iture | Release | Expend- iture |
| C16 | Supply of solar batteries to households in Gujong, Pongchula, Ridijong, Tradijong and Chapgoen communities, Phangkhag Gewog | 0.450 | 0.450 | 0.000 | 0.000 | 0.000 | 0.000 | 0.450 | 0.450 |
| C17 | Water source protection and enrichment planting in Phangkhar Gewog | 0.000 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |
| C18 | Construction of water supply system for Shingkhar Gewog renewable natural resources centre | 0.000 | 0.000 | 0.000 | 0.400 | 0.400 | 0.400 | 0.400 | 0.400 |
| C19 | Renovation of irrigation channel at Shingkhar | 0.500 | 0.354 | 0.146 | 0.100 | 0.246 | 0.246 | 0.600 | 0.600 |
| C20 | Wind-resilient roofing and improved internal electric wiring of Gomphu, Tama and Zurphey lhakhangs | 0.550 | 0.550 | 0.000 | 0.150 | 0.150 | 0.150 | 0.700 | 0.700 |
| D | Nangkhor Gewog | 1.250 | 0.507 | 0.743 | 0.000 | 0.743 | 0.715 | 1.250 | 1.222 |
| D1 | Establishment of community forestry group in Goling | 0.110 | 0.110 | 0.000 | 0.000 | 0.000 | 0.000 | 0.110 | 0.110 |
| D2 | Improvement of Zhobling farm road | 0.380 | 0.007 | 0.373 | 0.000 | 0.373 | 0.373 | 0.380 | 0.380 |
| D3 | Improvement of irrigation channel at Goling | 0.220 | 0.013 | 0.207 | 0.000 | 0.207 | 0.202 | 0.220 | 0.215 |
| D4 | Improvement of irrigation channel at Kikhar | 0.120 | 0.079 | 0.041 | 0.000 | 0.041 | 0.018 | 0.120 | 0.097 |
| D5 | Enhancement of the rural water supply scheme at Buli | 0.095 | 0.030 | 0.065 | 0.000 | 0.065 | 0.065 | 0.095 | 0.095 |
| D6 | Awareness of new human diseases | 0.125 | 0.088 | 0.037 | 0.000 | 0.037 | 0.037 | 0.125 | 0.125 |
| D7 | Bamboo planting in landslide-prone areas in Dunmang and hedge row planting in Kamjong | 0.110 | 0.090 | 0.020 | 0.000 | 0.020 | 0.020 | 0.110 | 0.110 |
| D8 | Widening of Kamjong-Tshachugang mule track | 0.090 | 0.090 | 0.000 | 0.000 | 0.000 | 0.000 | 0.090 | 0.090 |
| Total for all pilot local governments | | 13.188 | 6.829 | 6.359 | 6.059 | 12.358 | 11.798 | 19.247 | 18.627 |

SOURCE: DLG, January 2014.

NOTE: All figures in BTN million.

a. This activity had to be dropped due to retreat of water source; the materials procured have been kept for use in another water supply-related activity.

The United Nations Capital Development Fund (UNCDF) is the UN's capital investment agency for the world's 48 Least Developed Countries (LDCs). UNCDF uses its capital mandate to help LDCs pursue inclusive growth. UNCDF uses 'smart' Official Development Assistance (ODA) to unlock and leverage public and private domestic resources; it promotes financial inclusion, including through digital finance, as a key enabler of poverty reduction and inclusive growth; and it demonstrates how localizing finance outside the capital cities can accelerate growth in local economies, promote sustainable and climate resilient infrastructure development, and empower local communities. Using capital grants, loans, and credit enhancements, UNCDF tests financial models in inclusive finance and local development finance; 'de-risks' the local investment space; and proves concept, paving the way for larger and more risk-averse investors to come in and scale up.

LoCAL provides a mechanism to integrate climate change adaptation into local governments' planning and budgeting systems, increase awareness and response to climate change at the local level, and increase the amount of finance available to local governments for climate change adaptation.



Royal Government of Bhutan



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