Government of Nepal
Ministry of Federal Affairs and Local Development
Department of Local Infrastructure Development
and Agricultural Roads (DoLIDAR)

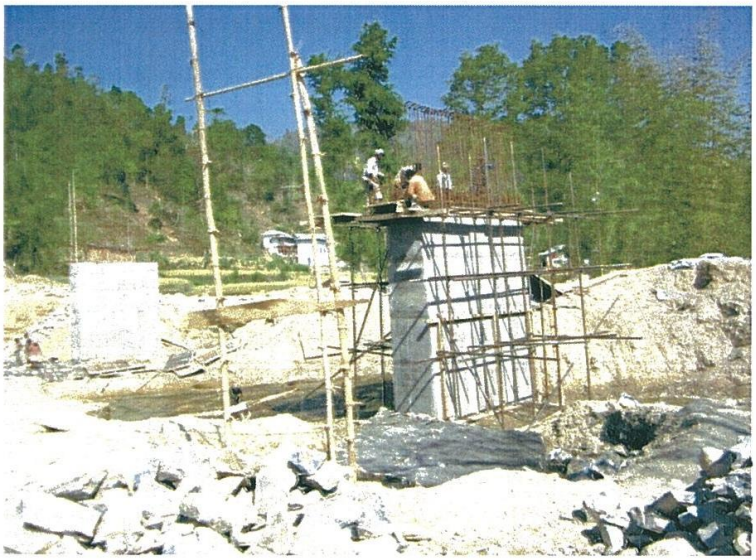
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of Foreign Affairs FDFA
Swiss Agency for Development and Cooperation SDC

Goverment of Nepal
Ministry of Local Development
Department of Local Infrastructure Development
and Agricultural Roads
Local Bridge Section

Yearly Plan of Operation (YPO)
for
Fiscal Year: 2069/2070

(16 July 2012 to 15 July 2013)
(Year II - Phase – I)



Placing reinforcement for capping of Mathura Bridge, Arghakhachi

LOCAL ROADS BRIDGE PROGRAMME (LRBP)
GoN (DoLIDAR) in collaboration with Swiss Agency for Development and Cooperation

(July, 2012)

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Annexes

List of Abbreviations

ACEM	Advance College of Engineering and Management
APR	Annual Project Report
BIMS	Bridge Information Management System
BOG	Basic Operating Guideline
BSPC	Bridge Selection and Prioritization Criteria
CA	Constitution Assembly
CMS	Contract Monitoring System
CS&SDA	Community Safeguard and Social Development Assistant
DAG	Disadvantaged Groups
DDC	District Development Committee
DTL	District Team Leader
DTMP	District Transport Master Plan
DoLIDAR	Department of Local Infrastructure Development and Agricultural Roads
DoR	Department of Roads
DRILP	Decentralized Rural Infrastructure and Livelihood Project
DRCC	District Road Coordination Committee
DRSP	District Roads Support Program
DTMP	District Transport Master Plan
DTO	District Technical Office/Officer
EI	Educational Institute
FCAN	Federation of Contractor's Association of Nepal
FFA	Fund Flow analysis
FY	Fiscal Year
GESI	Gender Equality and Social Inclusion
GoN	Government of Nepal
HH	Households
IoE	Institute of Engineering, Tribhuvan University
IEE	Initial Environment Examination
Kms	Kilometers
LDO	Local Development Officer
LBS	Local Bridge Section
LRBSU	Local Road Bridge Support Unit
LRBP	Local Road Bridge Programme
MBUC	Motorable Bridge User Committee
MoFALD	Ministry of Federal Affairs and Local Development
NPC	National Planning Commission
NVC	National Vigilance Center
OM	Organisational Management
OMS	Outcome Monitoring Summary
PPMO	Public Procurement Monitoring Office, GoN
PICC	Program Implementation Coordination Committee
PSU	Program Support Unit
PCU	Program Coordination Unit
RAIDP	Rural Access Infrastructure and Decentralization Project
R&D	Research and Development
RRRSDP	Rural Reconstruction and Rehabilitation Sector Development Program
SDC	Swiss Agency for Development and Cooperation
SRN	Strategic Road Network
SC	Steering Committee
SE	Sub-engineer
TA	Technical Assistance
UC	User Group
VDC	Village Development Committee
WB	World Bank
YPO	Yearly Plan of Operation
ZOI	Zone of Influence

1. Executive Summary

Government of Nepal has realized that local roads need to be functioning all-weather for maximum utilization of the investment made and building bridges on them is one of the most important aspect of making them pliable throughout the year. In this regard, SDC agreed to provide a Technical Assistance to MoFALD/DoLIDAR to support the implementation of Local Roads Bridge Program (LRBP). The duration of 1st phase is of 4 years (1st February, 2011 - 30th November, 2014). LRBP is executed by MoFALD/DoLIDAR and the respective District Development Committees (DDCs) which is entering into the second year of implementation.

During the first year, the project was engaged in administrative set up, procurement and capacity building activities. According to the YPO, criterion for screening and prioritization of bridges have been developed and approved by PICC/DoLIDAR. Likewise, Procurement Guideline, Code of Conduct for field staff, Baseline Survey Form for data collection has been initiated. Training and training providers are identified and selection process from the target group is going on in collaboration with FCAN.

As the programme started only last year and the construction of bridges usually takes at least two or more years, the tangible outcomes can be assessed after from third year onwards. However, important milestones on activities and outputs have been achieved. Central level staff member's positions in LRBSU are fulfilled. Within the reporting period (as of June, 2012), LRBSU have supported in the construction supervision of 25 bridges, design verification of 46 bridges that has already been designed by DoLIDAR or DDCs/DTOs through local Consultants. Additional design verification support has been provided for 25 bridges. Out of this, 6 bridges are of RRRSDP, 18 bridges are of RAIDP and 1 bridge is of Indian Government supported bridge.

In addition, walkover surveys of 284 bridges have been completed in 66 districts. An IEE of a proposed bridge site in Humla district over Karnali River has been conducted. A baseline household and settlement survey of the Molung bridge of Okhaldhunga and Sapsu/Tuwa bridges of Khotang districts has already been carried out. A programme orientation workshop for staff and district stakeholders especially LDOs and DTOs was organized. Three Bridge Design Management trainings were carried out to capacitate 57 technical persons of DTOs. Meetings are organized with IOE and interaction with representatives from Federation of Contractor's Association of Nepal is ongoing for occupation skill training. As a result LRBP has received request for collaboration in B. E. (Civil) final year student's project work related with bridge design from IOE Pulchowk Campus and Advance College of Engineering and Management. LRBP has also received request for support for M. Sc. Research Thesis (20 students) in Bridge Engineering.

In the fiscal year 2069/2070 (2012/13) 200 Kms. of local roads will be made all-weather through the construction of few permanent motorable bridges. LRBSU will support construction supervision of 40 bridges (15 new and 25 existing), preliminary and details design verification including environmental assessment of 65 bridges and additional designs of 10 bridges that has already been designed by DoLIDAR through out-sourcing. Additional support will be provided for 25 bridges from other projects such as RRRSDP, DRSP and DRILP. By the construction of above bridges with GoN funds, approximately 125,000 person days of employment will be generated and the programme will facilitate to secure at least 62500 person days of work to DAGs living within ZoI of bridges constructed.

Various courses such as bridge design management, contract management, supervision and management of bridge construction on Capacity building will be organized for engineers, and sub-engineers from DDC/DTO and DoLIDAR. Contractor's capacity will be enhanced by organizing schedules and quality assurance training. Preparation of Local Roads Bridge Norms and Standards, Technical Training Manuals and Social Training Manuals for local motorable bridges will also be initiated. LRBP will work closely with other SDC programmes in the districts to maximize benefits to the people of disadvantaged groups.

2. Outcome Monitoring Summary Sheet

The expected outcomes of the year Fiscal year 2012/2013 (2069/2070) as delineated in the LogFrame of LRBP document and based on the expected outputs are presented below:

Indicators	Phase Target Feb 11 - Nov. 14	Achievement Mar 11 - Jul 12	Expected Outcomes Jul 12 - Jul 13	Status/Comments
1. People have improved access to services and opportunities in the programme districts.				
1.1. Additional 1400 kms of roads are operating all year round because of the bridge built	1400 km of roads are operating year round	Not measurable yet[2/3] Baseline already started		Construction of bridges usually takes about 2 or more season/ year depending on the size of bridge, this outcome can only be measured after the completion of bridge construction. Even if some bridges will complete by end of this fiscal year, it will still take some time to see how benefits are accrued to the society through the use of the particular bridge.
1.2. Increase in the number of people having access to all weather road within 2 to 4 hrs of walk	50 % increase in number of people			
1.3. Utilization of health services in local health facilities increased by 20%	20 % increase			
1.4. Average freight cost decreased by 25% as compared to the baseline	25 % decrease			
1.5. Traffic and freight volumes (import and export) increased by 50% as compared to the baseline data	25% increase			
1.6. Increase in number of public utilities	Increase in establishment of utility services		Significant increase in establishment of utility services in ZOI	
1.7. 200 trained DAGs in construction skills are employed as skilled labor in construction business.	200 trained DAGs employed in construction	Training and training provider identified, selection process from the target group going on	100 trained DAGs receive skilled employment in the construction	24 Bridges baseline survey are planned for coming year At these sites DAGs will be identified and selected with the support from MBUCs for occupational skill trainings The selection of trainees will be started from last week of June to 3rd week of July 2012

Indicators	Phase Target Feb 11 - Nov. 14	Achievement Mar 11 - Jul 12	Expected Outcomes Jul 12 - Jul 13	Status/Comments
2. National and local institutions adopt appropriate local road bridge strategy.				
2.1. Endorsed Motorable (Local Road) Bridge Strategy is available	MB strategy developed/ adopted	First step of the Bridge Manual[1] , which is "Bridge screening and prioritization criteria (BSPC) developed and accepted "	Structure of manual proposed and agreed. Survey / Design standard bidding document manual is finalized	
2.2. Bridge builders are following the endorsed Local Road Bridge strategy	Bridge builders are following the LRB strategy	Not identified yet[3]	BSPC implemented DoLIDAR/MoFALD applies BSPC for the selection of new bridges .	DDC/DTO to follow BSPC
2.3. Local Road Bridge Section is managing and coordinating bridge building activities across the country	LBS managing/ coordinating bridge activities	Yes[1] LBS has been established with specific focus on Motorable Bridge. but still under-staffed	Continue strengthening Local Bridge section in DoLIDAR and DTOs	
2.4. DoLIDAR allocates budget regularly to districts to implement rural road bridges	DoLIDAR agreed budget NRs. 2000 million	DoLIDAR allocated budget NRs 377.1 million in this fiscal year to the districts	Proposed plan NRs. 1217.5 million to 42 districts	DoLIDAR agreed on NRs 377.1 million budget in YPO for the FY 2011/12. GoN approved budget for the FY 2011/12 is 347.1 million only which is 30 % less compared to stated in phase budget of 500 million. The proposed budget of Khotang and Okhaldunga districts for the FY 2012/13 is NRs 8 million and NRs 8 million respectively

Note:
1. Project is in transition phase /continuous strengthening required
2. Project has only started last year
3. Need at least 1-2 years to complete bridges construction and monitor results

3. Basic Information

3.1. Background of the project

One of the major causes of rural poverty in Nepal is isolation and lack of access to the markets and service centers due to poorly maintained local roads and the absence of adequate river crossings. Without the reliable motorable crossings on the rivers, people living in the area are not able to maximize the benefits from the roads. This hinders the optimum return on the investments made in the road. Thus, the main goal of LRBP is to improve livelihoods of people in the programme districts through improvement of better access and mobility to social and basic services and economic resources and opportunities of local people by building of local roads bridges. The programme covers all 75 districts.

MoFALD/DoLIDAR at the center is responsible for policy formulation and enforcement, raising/allocating funds and coordination among stakeholders. MoFALD/DoLIDAR provides grants to DDCs based on bridge demand of the district approved by the DDC councils. Likewise, enhancing the capacity of DoLIDAR, different partner agencies, contractors and consulting firms is one of the major components of the project. The project researches/pilots some of the cost effective designs, set norms and standards for this and recommend those norms & standards to DoLIDAR to apply in construction of local road bridges.

Apart from a few centrally executive bridges, at the district level, overall construction and supervision is the responsibility of DDC/DTO for which the capacity of DTO/DCC will be strengthened. Innovative approaches will be piloted by working through users committees and social issues will also be closely monitored. PCU/LBS with the support of LRBSU (TA team) will help the DDCs to perform these activities and will also help develop an appropriate and effective maintenance system.

3.2. Socio-political context of the country

Nepal is one of the poorest countries in the world. Poverty is deeply rooted and is of complex nature. Most households have little or no access to basic services e.g. primary health care, education, safe drinking water and sanitation services, safe mobility etc.

There are no elected representatives at the local government units. Local Development Officer and VDC Secretaries are now representing local bodies in DDC and VDCs. The all party mechanism has been dissolved recently. This will have implications on realistic/rational selection and planning of new bridges at local levels because the government officials may be less accountable and same holds for the local political representatives. Recently, the dissolution of CA has led to a political vaccum, which has increased criminality and impunity. The political situation in Nepal remains unpredictable. These will have influences over tendering and contracting processes in the districts, for which programmes will need to look for mitigative actions like e-bidding for tendering etc. Similarly, closures, demonstrations and protests in various forms restricting movements of staffs within and outside districts and thus impeding smooth operation of programme. In such cases, the programme will abide by the safety and security guidelines or (Basic Operating Guidelines) issued by SDC and development partners.

3.3. Working scenario and current context of local road bridges

In the fiscal year 2011/2012, the bridge selection criterion for local motorable roads did not exist except for those implemented under RAIDP. Therefore, political influences have an effect on bridge screening and prioritization of local road bridges. Since, DoLIDAR is responsible for local road bridges; Local Bridge Section (LBS) has been recently established within DoLIDAR. Until now, there are no standards and norms developed to maintain uniformity on the local road bridge construction as well as its entire project selection process.

In the present scenario, the demand of local road bridges comes to DDCs from different sources viz. local people, local political leaders, members of CA and so on without adequate information and verification of bridge sites. DDCs do not have the adequate capacity to verify and judge on the demand received of local bridges from different sources. Even if they do in rare cases, the political influence on bridge selection process often creates challenge for DDC and DoLIDAR to prioritize the bridges for design and construction. A criterion for screening and prioritization of bridges has been developed by MoFALD/DoLIDAR to overcome the above challenge.

Bridge design and construction is not emphasized in university syllabus in the engineering curricula of home universities. There is a lack of awareness about the value addition by bridge construction and it's potentiality in social development and improvement of livelihoods options of the community.

4. Expected Outcomes

There are two expected outcomes that would contribute in achieving the goal of the LRBP programme. They are:

Outcome 1: People have improved access to services and opportunities:
The programme has only started last year but construction of bridges usually takes about two or more seasons/years depending on the size of bridge. Therefore, the trend of outcomes will be assessed after bridge is build possibly from third year of the project. Out of the 40 bridges under construction (15 new and 25 on-going), it aims to complete few bridges in the second fiscal year 2012/13. It is expected that 200 Kms of local roads will be made all-weather through the construction of these motorable bridges. Training and training providers are identified and selection process from the target group is going on in collaboration with FCAN and starts soon. Hence, outcome 1 will not be fully realized in FY 2012/13 (2069/070). Results will be starting to reflect only from the fiscal year 2013/2014. Therefore, some of the target's achievement of this fiscal year will be assessed only after the completion of bridge construction.

Outcome 2: National and local institutions adopt appropriate local bridge strategy:
Criterion for screening and prioritization of bridges have been developed and approved by PICC/DoLIDAR and was forwarded to the policy committee of MoFALD. The criteria involves with fulfillment of minimum conditions for e.g. the bridge proposed should lie on the road which are approved in the DTMP and approved by district council; and other key criteria including number of people living in the ZoI, total length of the road served by that particular bridge, average daily traffic on that bridge/road etc. Although with these criteria approved, there still are political influences on bridge selection process that creates challenges for DDC and DoLIDAR to prioritize the bridges design and construction because of the current political situation. Besides, entire structure of survey and design manual, standard bidding document, Bridge construction supervision operational guideline and code of conduct for field staff has been initiated. This will lead to improvement in quality of survey, designs and construction of bridges in the years to come.

Transversal themes:
As the programme is in its initial phase, there hasn't been any specific GESI related work carried out in the bridge sites yet. However, contractors are encouraged to mobilize local peoples (DAGs) and women in the Bridge construction work with DDC and DoLIDAR. LRBP have made an Operational Manual, which includes, Policy of Interns considering female engineers, diversification of works force within LRBSU by integrating women staffs and including people from Dalits and Janajatis. In the preparatory work, inclusion of women and people from socially discriminated caste groups were given preference during the process of enumerators' selection for baseline survey.

During FY 2069/070, the representations of DAGs in MBUCs are expected to be at least 40%. Likewise, the representations of DAGs in key decision making process in MBUCs are expected to be at least 30%. Public hearing and public auditing will be carried out at least once in every bridge site inclusively.

5. Expected Outputs

In the FY 2068/069, LRBSU has supported the construction supervision of 25 new bridges in 23 districts and design verification of 46 bridges that has already been designed by DoLIDAR or DDCs/DTOs through local consultants. Besides, additional support is provided for 25 bridges. Out of them field verification and design construction services are provided to RRRSDP for 6 bridges, design support to 18 RAIDP and 1 Indian Government supported bridges. Likewise, comment/suggestion on design reports of these bridges are given after site visits and field verification to the Consultants through DoLIDAR. In the mean time, walkover surveys for 284 bridges in 66 districts have also been completed.

During its first year, the project was engaged in administrative set up, procurement, capacity building and design verification activities. LRBP is only to provide technical assistance to the DDC/DTO through DoLIDAR. A programme orientation workshop for staff and district stakeholders especially LDOs and DTOs was organized to brief on LRBP Program document. In addition, three Bridge Design Management trainings were carried out to capacitate 57 technical persons of DTOs. Meetings have been organized with different dignitary personnel of IOE, communicated for cooperation work, and interaction meeting is being in progress with representatives from Federation of Contractor's Association of Nepal (FCAN) for occupation skill training. After the meetings, requests have been received for collaboration for B.E. (Civil) final year student's project work related with bridge design from IOE Pulchowk Campus and Advance College of Engineering and Management. In addition to that request has been received for support for M.Sc. Research Thesis (20 students) in Bridge Engineering.

Baseline (HH/settlement) survey of 3 Bridges especially Sapsu, Tuwa of Khotang, and Molung of Okhaldhunga districts has been done. 24 Bridges baseline survey are planned for coming year. At these sites DAGs will be identified and selected with the support from MBUCs for occupational skill trainings in order to 100 trained DAGs employed in construction. Besides, Survey/Design standard bidding document manual will be finalized and Bridge Screening and Prioritization Criteria implemented by DDC/DoLIDAR.

During this fiscal year, approximately 125,000 person days of employment will be generated and the programme will facilitate to secure at least 625, 00 person days of work to DAGs living within ZoI of bridges constructed. LRBSU will support construction supervision of 40 bridges (15 new and 25 existing), preliminary and detail design services including environmental assessment of 65 bridges and additional designs verification of 10 bridges that has already been designed by DoLIDAR through out-sourcing. Additional support will be provided for 25 bridges from other projects such as RRRSDP, DRSP and DRILP. Environmental assessment will be carried out for all bridges as required by GoN rules and regulations.

Orientation on programme and workshops shall be organized at cluster/district level to update on LRBP, maintain transparency and reporting requirements. It is expected that 100 numbers of DAGs, including women, will be trained in construction skills. In the past, trainings conducted were more informal and without standard curriculum. Learning from past, the programme would harmonies the skill training (related to Bridge) and intends to provide more formal and standard training packages with proper curriculum so that the trainees can eventually use the skill acquired for their sustained livelihoods beyond the project.

Some pilot initiatives on innovative false works, pile foundation and anchoring will be carried out through technology transfer from Swiss firms/companies to about 5 national construction companies. About 5 Local Consultants will be trained in new concepts of bridge designs and

management. Support will be provided for 2 Educational Institutes for research students focusing on bridge building with innovative approaches. Five persons from discriminated groups including women will be selected for an internship in the fiscal year 2012/2013.

6. Programme Management and Financial Resources

6.1. Programme Steering:

As per programme document, Steering Committee will meet twice a year to review the progress, resolve policy issues, and guide DoLIDAR. Therefore, SC meeting will be held tentatively in June 2012 and January 2013. In June 2012, SC/PICC meeting will endorse Yearly Plan of Operation of fiscal year 2069/2070. SC shall give instruction or decision on any change or amendment on programme/policy to improve the performance of the programme through these meetings. Besides, Programme Implementation Coordination Committee will meet at least twice a year and will advise the PCU and mandate to review the annual progress. Therefore, PICC meeting will be held tentatively in August 2012, if needed, and March 2013.

6.2. Programme Management

Local Bridge Section has been established in DoLIDAR but still under staffed, there is a team of 2 engineers apart from the local bridge section chief, designated for local roads bridge programme, who coordinates overall programme activities with the help of LRBSU TA team. At the district level, overall construction management will be the responsibility of DDC/DTO. The LRBSU's technical team consisting of District Team Leader will backstop DDC/DTOs technically in selected clusters of districts, whereas sub-engineers will be based at each bridge construction site of the districts to facilitate DTO on demand basis. Similarly, the community safeguard and development assistants will provide support to facilitate local groups and communities in the bridge construction sites to promote gender equity and social welfare in relation to bridge construction. In order to define and set the roles and responsibilities of LRBSU team in construction supervision a draft Tripartite Agreement document is developed.

6.3. Technical Audit

Technical audit will be carried out for completed and ongoing bridges constructed by DoLIDAR and DDCs. In this regard, DoLIDAR shall request National Vigilance Center to conduct a third party technical audit for independent monitoring of quality of constructed bridges. DoLIDAR will provide required budget to NVC for technical audit.

6.4. Public Hearing and Audit

Public Hearing and Public Auditing are one of the major interventions that are mandatory for motorable bridge programmes to promote good governance practices in terms of maintaining transparency and accountability. This will not only help improve the financial management system in the DDC, communities/groups, but will also help in improving social inclusion in terms of participation and representation of women, Dalits and the DAGs in the decision making process. Public hearing shall be conducted at ongoing bridges constructed by DoLIDAR and DDCs. However, Public Audit shall be made, after completion of each bridge at each site.

6.5. Quality Monitoring

Quality parameters are not strictly adhered by consultants and contractors, currently though quality assurance of constructed bridges is of prime importance. So, quality monitoring of all the bridge sites is quite important no matter how challenging it tends to become. The construction of motorable bridges shall be monitored through the entire process from site assessment until completion of the bridges. The quality of construction materials, fabricated parts as well as quality of works shall be monitored at different level.

The responsibility of construction supervision and quality monitoring lies with DDCs/DTOs. LRBSU is responsible for overall technical assistance and is filling in the capacity gap of DoLIDAR, DDCs/DTOs and private sectors. To cope with this, Bridge Information Management System (BIMS) is initiated by LRBSU to record data and information related to each bridge sites. As a part of BIMS, LRBSU will commence a web based Contract Monitoring System (CMS) which enables the stakeholders like DDC/DTO and DoLIDAR to monitor the physical as well as financial progress and status of each and every on-going bridge construction contract.

6.6. Financial Resources

Phase plan, overall budget plan for the year 2012/13 is presented in tabular form below. Head wise total budget for the FY 2069/70 that will be contributed from SDC fund is presented in annex 2. A total budget of 732.5 million is required in the fiscal year 2069/070 for achieving the set targets by DoLIDAR to the DDCs (Please see detail in annex 9) where the technical assistance annual budget for the year 2012/2013 is NRs 321.33 million (Please see detail in annex 2). The DoLIDAR proposed budget is subject to revisions until it is finally approved by the GoN. Fund Flow Analysis estimate on the budget of FY 2069/70 is annexed to this YPO (Please see detail in Annex 3).

6.7.1. Summary of Financial Plan

(Figures in '000 NPR)

SN	Items	Contributors		Budget for Phase I	Budget FY: 2011/12	Expenditure FY 2011/12 up to June 15, 2012	Budget for the FY: 2069/070 (2012/013)
		SDC	GoN				
1	Construction and Piloting of new local roads Bridges	-	2,000,000	2,000,000	377,100.00[1]	347,100.00*	732,500.00
2	Technical Assistance at central and district Level including capacity building, research & development	658,000[2]	-	658,000	166,985.90	61,656.00**	321,322.34
Total		**658,000**	**2,000,000**	**2,658,000**	**544,085.90**	**408,756.00**	**1,053,822.34**

**Actual figures will be available after 15 July, 2012*

***Initial Phase/Establishment/Concentration on design verification.*

7. Lessons Learnt, Issues and Solutions

During the entire period of LRBP till now, in the course of execution, certain issues have been noted. The following table illustrates those issues and way forward with solutions. In the overall policy / strategy level the issues are

[1] Approved Budget for the FY 2011/12 is 295 million only
[2] CHF1 =NRs. 70 based on the approved Programme Document, July 2010.

LESSONS LEARNT / ISSUES	WAY FORWARD / SOLUTIONS
Overall bridge planning	
Difficulties to select the most appropriate bridge projects in the districts: high numbers of bridges, political pressures for selection is applied to almost all	Walkover surveys by joint technical and DDC/DTO's team
	Application of Prioritization and Screening Criteria
	Selection and planning of essential bridges based on prioritization
Budgeting procedure does not allow sufficient time for an adequate planning	Clear Demarcation in Planning - and Implementation-Budget
Norms, and Standards, Procurement procedures need to be revised	Standard Bidding Document (specific for bridges, based upon PPMO's)
	Standard Type Designs (RCC and Steel)
Construction Supervision	
Clear definition of roles of DDC/DTO and LRBSU for deployment of LRBSU Staff in construction supervision	Tripartite Agreement with DDC, DoLIDAR and LRBSU to clarify on roles of LRBSU staff / DTO / DoLIDAR)
	LRBSU-Team's role : Support to the Project Manager / acting as Resident Engineer Provide office spaces for LRBSU technical support team within DDC/DTO to support more effectively
Bridge Design	
Present Bridge Design process for survey, design, detail investigation and estimation is insufficient due to time constraints, procedure, formation of Joint Ventures, untimely involvement of the specialists	Phase wise design approach, specific ToR for bridge design, investigations, bridge concept, DPR, IEE
	Direct involvement of Experts and Check engineers
	Contract Separation in 3 Design Phases, after each phase the results will be checked and approved or the contract be terminated.

In the area of Capacity building the following cases have been observed

Design approaches / Quality of Designs recommended are neither appropriate nor optimized resulting to redesigning of many bridges costing more time	Improvement of the design approach, Training on new technologies for design optimization so that prototypes can be applied
The designs / investigations are of low quality and un-professional dealings by the Consultants	More Involvement from client side and check unhealthy competition (low bidding)
	Regular meetings and communications
	Discouraging JV making trend (big one just giving away the profile) and making all partners equally liable
Non-conforming geological investigations and reports	Introduction of system of making specialized drilling and soil investigating companies
	Enhancing capacity of drilling firms

In the area of private sector, the construction entrepreneurs seem to be unaware and negligent of many contractual obligations as shown below.

Negligence, lack of awareness on clauses; important documents are not prepared	LRBSU supported trainings for local contractors : Work Schedule / Quality Assurance Plan (QAP)
	Specifications, Working methods, planning of the execution
Challenge to work with new	Introduction of cased bored piles needed

LESSONS LEARNT / ISSUES	WAY FORWARD / SOLUTIONS
technologies	Introduction of heavy anchors (>200 to) for motorable bridges needed
	Introduction of falsework

It has been felt that, a certain new contract management approaches shall be introduced the effective implementation of technology transfer and fulfillment of target of generating employment for the target groups.

Testing new concepts and approaches and embedments	Clauses in Contracts to work with trained and nominated Subcontractors for specific works
	Side-Contractors (Users Committees for inclusive participation)
Local (DAG) involvement	Separation of works packages for e.g. river training, bio-engineering works
	Empowerment of locals (DAGs); skill trainings

On behalf of,

Madhav Prasad Bhattarai

Programme Coordinator

LRBP/ DoLIDAR

Date: July 10, 2012

Annexes

Annex 1: Motorable (Local Roads) Bridge Program - Logical Framework (2011/2012 - 2013/2014)

Narrative Summary	Objectively Verifiable Indicators/ Targets	Means of Verification	Assumptions (A) and Risks (R)
Goal People in the programme districts[3] have improved livelihoods.	• Per capita income of households within the programme districts (zone of influence) increased by 25% by 2020 • Market prices of food decreased in the programme districts (zone of influence) by 25% by 2020[4]	CBS published data NPC reports Programme/MoFALD survey and monitoring reports	The present political transition will favour project operation (A). Cost of construction materials do not change significantly. (A)
Outcomes 1. People have improved access to services and opportunities in the programme districts.	By the end of the project phase: 1.1 Additional 1400[5] kms of roads are operating all year round because of the bridge built 1.2 Increase in the number of people having access to all weather road within 2 to 4 hrs[6] of walk 1.3 Utilization of health services in local health facilities increased by 20% 1.4 Average freight cost decreased by 25% as compared to the baseline data 1.5 Traffic and freight volumes (import and export) increased by 50% as compared to the baseline data 1.6 Increase in number of public utilities[7] 1.7 200 trained DAGs in construction skills are employed as skilled labor in construction business.		While bridge building is highly mechanized, there is a possibility to introduce labour based technologies. (A) DoLIDAR/DDCs give due attention to local road maintenance. (A) BOGs are adhered to by all parties. (A) GoN systems leads to administrative delays (R)
2. National and local institutions adopt	2.1 Endorsed Motorable (Local Road) Bridge Strategy is available		District Roads Coordination Committees do not function well in the absence of elected people

[3] Programme districts will be selected representing all geographic/ecological belts and the development regions but especial consideration will be given to SDC cluster districts.

[4] It would not be correct to compare the price of food to a baseline price set at the beginning of the project as a lot of externalities could affect the price. However the price of food at the market for the districts / town serviced by a motorable bridge should be compared to the price in another district or town of similar conditions that are not serviced by a motorable bridge. the difference in price will be partly explained as an impact due to the presence of a motorable bridge

[5] This number is calculated on the basis that each bridge will make at least 10 kms of road all weather and considering 80 bridges to be constructed by this programme and additional support to 60 bridges that will be other projects within DoLIDAR.

[6] 2 hrs of walk in Terai and 4 hrs of walk in the hills

[7] Schools, colleges, health posts, shops, markets, pharmacies, clinics etc.

appropriate local road bridge strategy.	2.2 Bridge builders[8] are following the endorsed Local Road Bridge strategy[9] 2.3 Local Road Bridge Section is managing and coordinating bridge building activities across the country 2.4 DoLIDAR allocates budget regularly to districts to implement rural road bridges		(R) Programme will have no control over transport syndicate systems (R)
Outputs			
Outputs related to Outcome 1: Access			
Output 1: **DAG[10]s within the zone of influence of the motorable bridge benefited from employment in bridge construction works.**	• **250'000[11]** person days of jobs created during construction of local road bridges • Out of the total employment, 50 % of jobs are utilized by DAGs • **200** number of DAGs including women trained in additional/specific construction related skills • 40% of members of UCs are from disadvantaged groups • 30% representation of DAGs in key decision making positions of Bridge UCs	Reports from User Committees Programme Annual Reports	
Outputs related to Outcome 2: Capacity			
Output 2: Local Bridge Section in DDCs/DTOs build rural road bridges with appropriate technology[12]	• **80 number (3200 meters)** of Motorable (local road) bridges are built. • Additional **60 number** of bridges are designed for other projects within DoLIDAR. • Cost of local road bridge per unit is reduced as compared to National Standard propagated by DoR for strategic road network. • 10% of the construction materials used are local	Programme Annual Reports Inventory of materials used Verified expenditure reports for each bridge construction	**Corresponds to component 1**

[8] DDCs and Private sector
[9] Especially the norms and standards approved by MoLD/DoLIDAR
[10] Discriminated and poor as defined by SDC
[11] The number of employment considering 20% of the budget going to construction of local bridges
[12] Cost-effective, technically sound, labor based and locally adaptable

	• Majority of construction materials used are nationally manufactured • LBS/DTO are monitoring and supervising the bridge construction works		
Output 3: Local Bridge Section/ DoLIDAR piloted new type of bridges and approaches	• Some (20% of 80 bridges) bridges are piloted with new design concepts, technologies appropriate for local roads in Nepal (such as truss, suspension, arch, compact, modular and pre-stressed RCC bridges) • New and innovative methodologies and approaches[13] are piloted and adopted. (such as working with User committees and bridge construction groups, adopting inclusive workforce, better workers welfare etc.)		Corresponds to **Component 1**
Output 4: Local Bridge Section/ DoLIDAR have the capacity to develop Standard Norms and Procedures	• Local Bridge Section (LBS) is fully functional at DoLIDAR. • Trained central and local technical/managerial capacities are available and working for LBS • LBS/DoLIDAR are designing and/or outsourcing designs of the bridges to private sector • DoLIDAR/LBS staff are verifying the motorable bridge designs/standards • Motorable Bridge technical norms and standards are available. • Motorable Bridge Maintenance Manuals and Guidelines are available. • Technical and social training Manuals targeting district on local road bridges are available • Standard monitoring and reporting guidelines are available • Preliminary National Inventory for Motorable Bridges requirements is available	Endorsed Documents on norms and standards, guidelines, manuals etc. Programme Annual Reports Verified drawings and designs Site log-book on supervision Contracts with private sector and DDCs	Corresponds to **Component 2, 3 & 4.**
Output 5: Private sector have the capacity for the construction of local road bridges	• 20 trained construction companies are available for bridge construction works. • 10 trained consulting firms are available for bridge constriction works. • 4 Educational institute adopt bridge building in their Engineering syllabus		Corresponds to **Component 4**

[13] Innovative approaches will be piloted: for example: working through users committees, enhancing labour component in the construction, inclusive participation of the work-force, adequate social welfare for the workers;

Annex 2: Detail Financial Plan for TA Fund from SDC

Figures in '000 NPR'

SN	Budget Head	Actual Expenditure in 2010/11	Budget for the FY 2011/12	Expenditure FY 2011/12 up to June 15, 2012	Budget for the FY 2012/013
1	Fees for National Experts	-	2,490.00	139.95	5,800.05
2	Remuneration to National Support Staffs	1,565.00	63,661.00	23,643.75	65,000.00
3	Reimbursable Costs	56.00	1,867.50	4,304.69	1,500.00
4	Purchase of Equipment for PIU	1,357.00	17,392.63	16,940.24	15,782.04
5	Operating Costs PIU	2,599.00	11,190.72	9,336.14	12,440.25
6	Consulting services for designing	-	43,160.00	375.50	53,300.00
7	Research and Development	-	18,924.00	3,342.99	153,300.00
8	Capacity Building	73.00	8,300.00	3,572.74	14,200.00
	Total	**5,650.00**	**166,985.8512**	**61,656.00**	**321,322.34**

Note:
LRBSU intends to transfer and use CHF 700,000 from the budget head 'Consulting Service for Designing' to the budget head 'Research and Development'.
Any over spend or under spent amount are to be adjusted in the budget of FY 2012/013

Annex 3: Fund Flow Analysis (FFA) for the parts of SDC's TA

Fund Flow Analysis (Estimate)

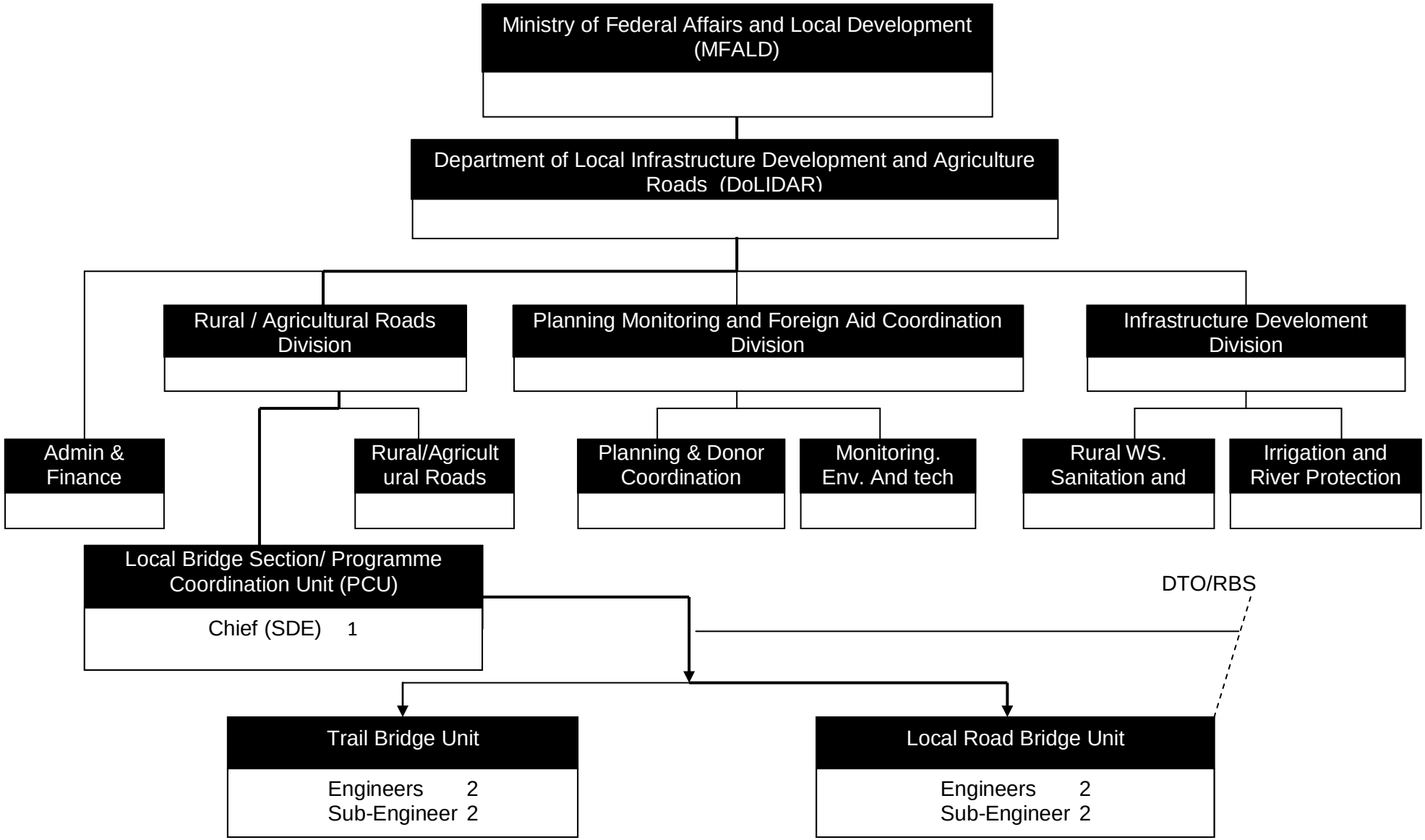
Project:	Motorable Local Roads Bridge Programme (MLRBP)
Period of analysis	FY 2012/13 (16.07.2012 to 15.07.2013)
Budget	4,088,104
Currency	CHF

			Fund Receivers					Beneficiaries			Investment		
	Budget Headings	Budget Amount	Geographical Outreach			Discrimination Perspective (Cast, ethnicity / gender)		Disadvantaged group perspective (Economically poor and socially discriminated)			Cluster perspective (Swiss cluster districts and others)		
		4,088,104	District/rural	National	International	Discriminated	Non - Discriminated	DAG	Non-DAG	Not attributable (common costs)	Central cluster districts	Western cluster districts	Others and National
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	**Services Headquarters**	**63,279**											
	1.1 Fees HQ staff of Contractor	47,074			100%	8%	92%			100%			100%
	1.2 Reimbursable costs HQ staff	16,205		5%	95%		100%			100%			100%
2	**Local Office of Contractor**												
3	**Project Implementation**	**1,571,325**											
	Long Term Experts	**290,875**											
	3.1 Fees Professional	270,375			100%		100%			100%			100%
	3.2 Travel exps of resident expatriates and dependents	4,900		100%			100%			100%			100%
	3.3 Expenses of foreign residence	15,600			100%		100%			100%			100%
	Short term experts	**225,500**											
	3.4 Fees national & International experts	200,000		32%	68%	10%	90%			100%	25%	25%	50%
	3.5 Reimbursable costs	25,500		11%	89%		100%			100%			100%
	Local support	**1,054,950**											
	3.6 Remuneration of National Support Staffs	725,000	60%	40%		40%	60%			100%	25%	25%	50%
	3.7 Reimbursable costs	16,700	60%	40%		40%	60%			100%	25%	25%	50%
	3.8 Purchase of equipments for PIU	175,000		43%	57%		100%			100%	25%	25%	50%
	3.9 Operating costs PIU	138,250	20%	80%		5%	95%			100%	25%	25%	50%
4	**Administrated Project Funds**	**2,453,500**											
	4.1 Consulting services for designing	592,250	10%	90%		40%	60%	30%	70%		25%	25%	50%
	4.2 Research and Development	1,703,250	30%	70%		40%	60%	30%	70%		25%	25%	50%
	4.3 Capacity Building	158,000	40%	60%		40%	60%	30%	70%		25%	25%	50%
	Total amount	**4,088,104**											
			1,106,070	**2,374,865**	**607,169**	**1,308,093**	**2,780,012**	**736,050**	**1,717,450**	**1,634,604**	**927,113**	**927,113**	**2,233,879**
					4,088,104		**4,088,104**			**4,088,104**			**4,088,104**

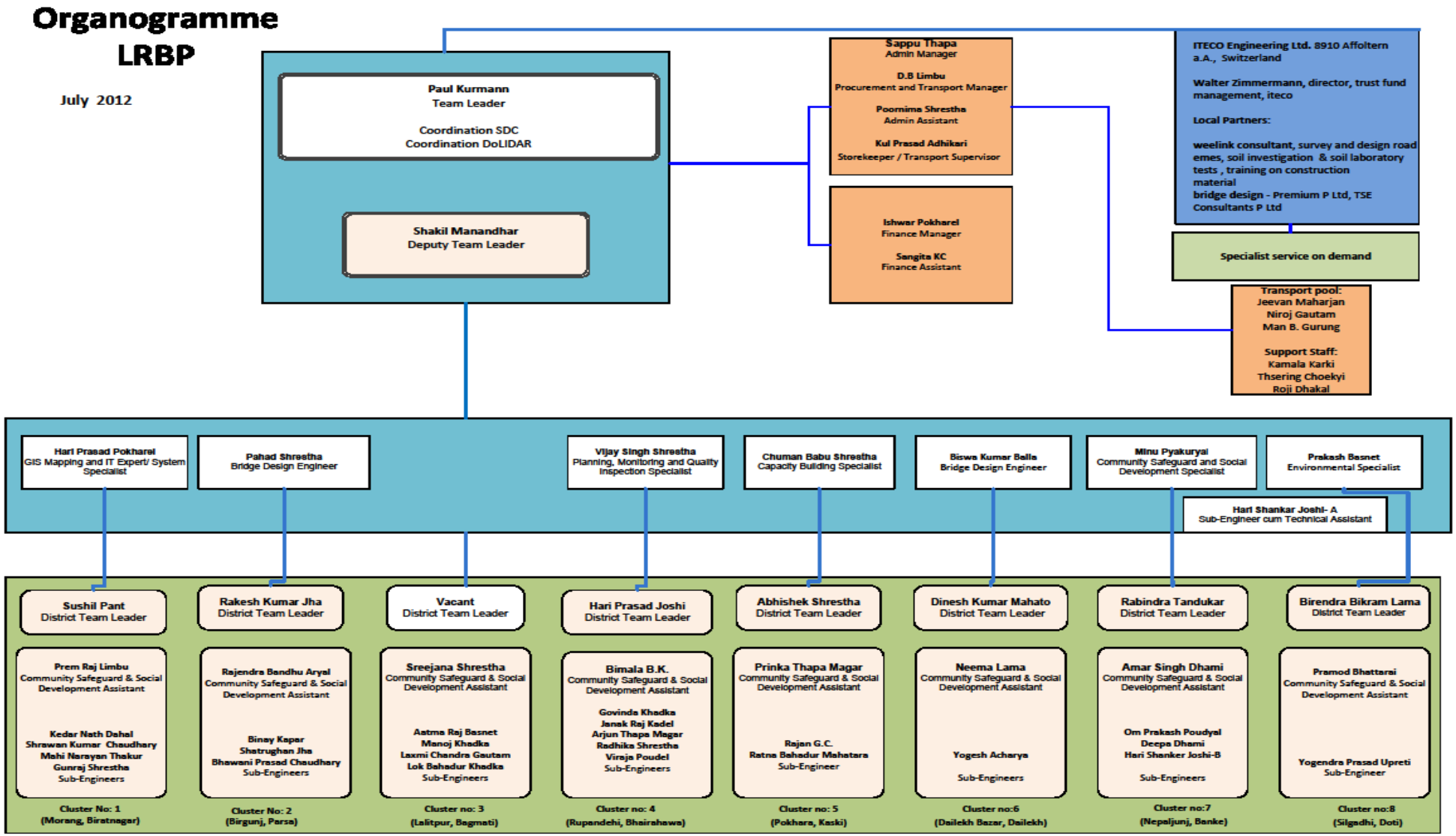
Action Line	
Gender Beneficiary Monitoring	**Amount**
Consulting services for designing	592,250
Remuneration to national support staffs	725,000
Research and Development	1,703,250

Male	Female
70%	30%
75%	25%
70%	30%

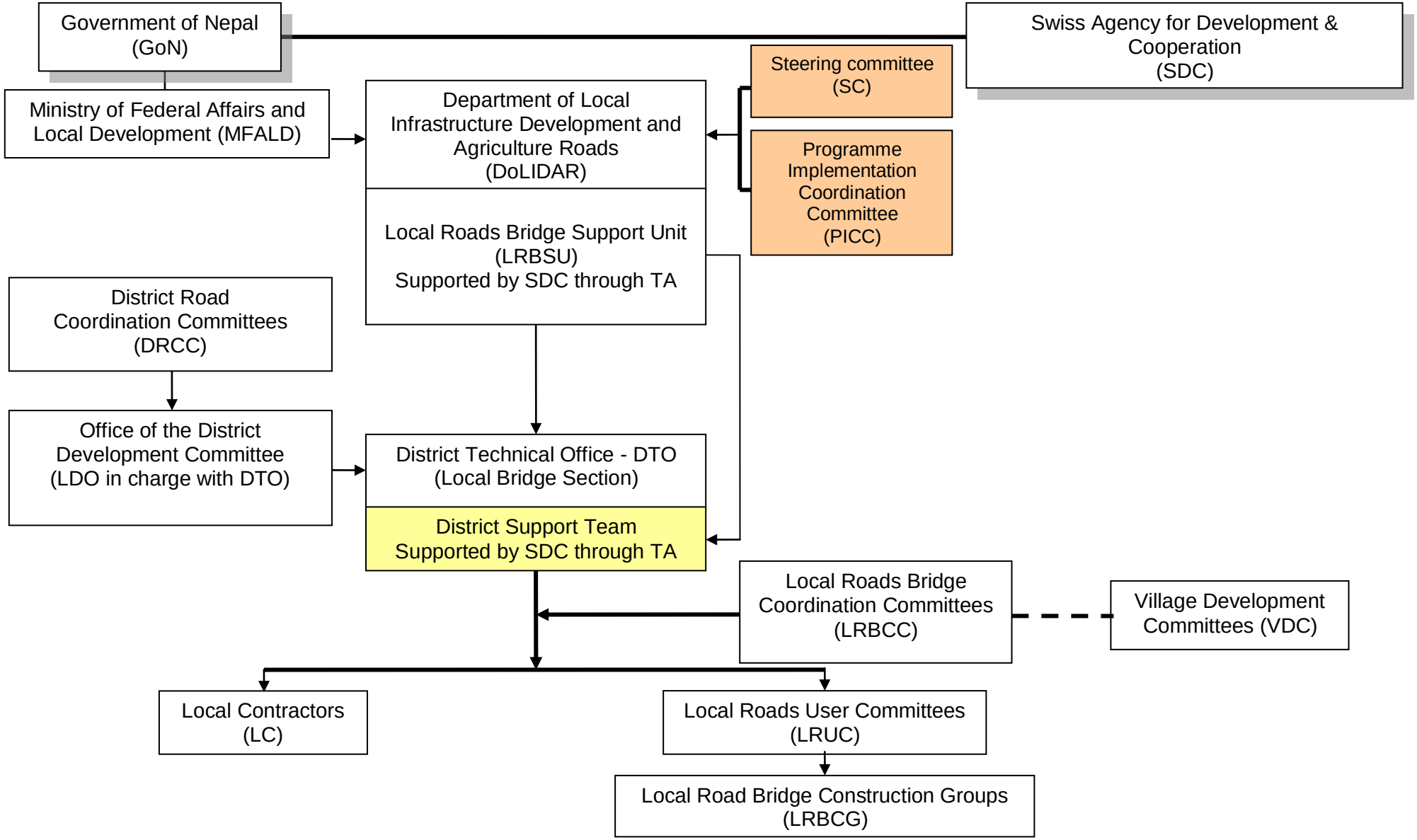
Annex 4 : Organogram - DoLIDAR



Annex 5 : Organogram - LRBSU



Annex 6: Programme Management Structure (LRBP)



Annex-7: Procurement Plan (Logistic/Equipment and Support)

							('000)	
SN	**Name of Item**	**Quantity**	**Unit**	**Currency**	**Rate**	**Equivalent to NRs.**	**Amount**	**Remarks**
1	**Office vehicles**							
1.1.	Cars/Jeeps	1	#	JYP	2,000	2,200	2,200	asap/ as required
1.2.	Motorbike 25-Normal and 5-Gender friendly Motorbike	30	#	INR	45	72	2,160	Aug
	Miscellaneous (5%)			NRs.			109	
	Sub- total (1)			**NRs.**			**4,469**	
2	**Office & Field Equipments (Computers, printers, plotters)**							
2.1.	Desktop Computers (Central Office)	2	#	NRs.	60	60	120	asap
2.2.	Laptop Computers (Central Office)	45	#	NRs.	65	65	2,925	asap
2.3	Color Printer (Central Office)	1	#	NRs.	500	500	500	asap
2.4	Color Copier (Central Office)	1	#	NRs.	500	500	500	June
2.5	Field equipments for site/cluster offices*(Theodolite, Level Machine, GPS, camera, slump test, sieve, coube moulds, camera, mobile phone, inclinometer, site office setup, cluster office setup etc….)*	8	Sets	NRs.			26,655	asap
2.6	Pile boring machine (from R&D budget)	2	#	NRs.	50,000	50,000	100,000	asap
2.7	Drilling Equipment/Soil Investigation (from R&D budget)	2	#	NRs.	5,500	5,500	11,000	asap
2.8	Formwork/Falsework System (from R&D budget)	60	M	NRs.	1,000	1,000	60,000	asap
2.9	Miscellaneous (5%)			NRs.			1,353	
	Sub- total (2)			**NRs.**			**217,765**	
3	**Softwares and other references (Books, bridge design & GIS Softwares)**							
3.1.	Bridge Design and FEM GIS softwares	3	#	NRs.	1,500	1,500	4,500	asap
3.2.	Maps and Books	2	#	NRs.	50	50	100	asap/ as required
3.3.	Servers and its accessories	1	#			500	500	asap
	Miscellaneous (5%)			NRs.			85	
	Sub- total (3)			**NRs.**			**5,185**	
	Total (1+2+3)						**227,419**	

Annex 8: Expected Outputs Summary

Shown below is a summary of status/achievement and expected outputs/target of the fiscal year 2069/2070 (2012/2013):

Outputs	**Phase Target (2011 – 2014)**	**Target for FY-2011/2012**	**Status/Achievement March 2011 - 15 July 2012**	**Target for FY-(2012/2013)**
Output 1: DAGs within the zone of influence of the motorable bridge benefited from employment in bridge construction works				
250'000 person days of jobs created during construction of local road bridges	250'000 person days of jobs created	-	Concept identified but not applied in any of the bridge construction sites as they were already in different stage of construction. It will only be applied in new bridges where LRBSU will be fully involved from the beginning of construction.	125,000 person days Develop contract document
Out of the total employment, 50 % of jobs are utilized by DAGs	50 % utilized by DAGs	-		62,500 person days for DAGs
200 number of DAGs including women trained in additional/specific construction related skills	200 DAGs & women trained in construction skills	50 persons	Training not conducted but preparation for the training completed	100 persons
40% of members of UCs are from disadvantaged group	40% UCs are from DAGs	-	-	16 MBUCs will be formed and representations of DAGs in MBUCs are expected to be at least 40%.
30% representation of DAGs in key decision making positions of Bridge UCs	30% DAGs in decision making positions	-	-	16 MBUCs will be formed and representations of DAGs in key decision making process in MBUCs are expected to be at least 30%
Output 2: Local Bridge Section in DDCs/DTOs build rural road bridges with appropriate technology				
80 number (3200 meters) of Motorable (local road) bridges are built.	80 bridges	Design verification of 30 bridges Design services for 40 new bridges 20 bridges under construction	46 bridges design verified 15 new bridges are designed 25 bridges are under construction where 6 bridges Environmental	Design verification of 10 bridges Preliminary and detail design including Environmental Assessment for 65 bridges 15 new bridges and 25

Outputs	Phase Target (2011 – 2014)	Target for FY-2011/2012	Status/Achievement March 2011 - 15 July 2012	Target for FY-(2012/2013)
		supervision at Districts Walkover Survey	Assessment done Walkover Survey of 284 bridges done	existing bridges will be continued under construction upervision at Districts 100 bridges Walkover survey continued for this year
Additional 60 numbers of bridges are designed for other projects within DoLIDAR.	60 bridges	Design services for 10 additional Bridges including those of other programmes (RAIDP, RRRSDP, DRILP)	Total design supports to 25 bridges Out of 25 bridges, field verification and design construction supports provided to RRRSDP for 6 bridges Design verification support to 18 RAIDP bridges and 01 Indian Government supported bridge	Design services for 25 additional Bridges including those of other programmes
Cost of local road bridge per unit is reduced as compared to National Standard propagated by DoR for strategic road network.	Cost of local road bridge per unit is reduced	-	-	As programme is in initial phase Cost of different types of bridges will be recorded and documented for future reference and comparison.
10% of the construction materials used are local	10% Local materials	-	Most of the Contractors of 23 district's are using 10% of local construction materials such as sand, boulders and bamboos	To be continued with improvement
Majority of construction materials used are nationally manufactured	Nationally manufactured materials	-	Most of the Contractors of 23 district's are using nationally manufactured construction material such as cement, bars, scaffolding	To be continued with improvement
LBS/DTO are monitoring and supervising the bridge construction works	Monitoring and supervising the bridge	Monitoring and supervising by	Monitoring and supervision done from DTOs & LBS/DoLIDAR and tripartite	Monitoring and supervising by LBS/DTO

Outputs	Phase Target (2011 – 2014)	Target for FY-2011/2012	Status/Achievement March 2011 - 15 July 2012	Target for FY-(2012/2013)
	construction works	LBS/DTO	agreement (TPA) in final stage	and TPA endorsed
Output 3: Local Bridge Section/ DoLIDAR piloted new type of bridges and approaches				
Some (20% of 80 bridges) bridges are piloted with new design concepts, technologies appropriate for local roads in Nepal	20 bridge out of 80	05 bridge out of 20	The concept of pilot bridge has been developed (Introduction of new approached in design and construction for possibility of false works, pile foundation, composite, cable, arch structure)	5 bridge with innovative approaches initiated (False work and Pile foundation)
New and innovative methodologies and approaches are piloted and adopted. (such as working with User committees and bridge construction groups, adopting inclusive workforce, better workers welfare)	New and innovative methodologies and approaches are piloted and adopted.	-		Standard contract document developed and implemented
Output 4: Local Bridge Section/ DoLIDAR have the capacity to develop Standard Norms and Procedures				
Local Bridge Section (LBS) is fully functional at DoLIDAR.	LBS established at DoLIDAR.	Initiate to establish LBS at DoLIDAR.	Local bridge section established and fully functional at DoLIDAR	To be continued with improvement (Strengthening)
Trained central and local technical/ managerial capacities are available and working for LBS	Trained LBS persons	-	57 technical person trained in Bridge Design Management from LBS/DoLIDAR and DTOs	Train 75 staff from LBS/DoLIDAR and DTOs
LBS/DoLIDAR are designing and/or outsourcing designs of the bridges to private sector	Outsourcing designs of the bridges to private sector	Design verification and services of (30+10) 40 bridges	Design verification and services provided to 61 bridges with support from LRBSU	Verification and design services continue with the assistance from LRBSU
DoLIDAR/LBS staff are verifying the motorable bridge designs/standards	Verifying bridge designs			Initiate to verify bridge designs by LBS/DoLIDAR
Motorable Bridge technical norms and standards are available.	Norms and standards prepared	-	Initiation of standard type design	Preparation of 3-4 standard type design
Motorable Bridge Maintenance Manuals and Guidelines are available.	Maintenance Manuals & Guidelines prepared	-	-	-
Technical and social training Manuals targeting district on local road bridges are available	Technical and social training Manuals prepared	-	-	Guideline for Baseline survey & curricula for Sub-engineer developed for construction supervision

Outputs	Phase Target (2011 – 2014)	Target for FY-2011/2012	Status/Achievement March 2011 - 15 July 2012	Target for FY-(2012/2013)
Standard monitoring and reporting guidelines are available	Prepared Monitoring and reporting guidelines	-	LRBP has developed a web page named www.lrbpnepal and on line information platform e-filing system that is activated so that people can access anytime from anywhere Planning monitoring of bridges is ongoing at DDC and DoLIDAR and reporting formats from DDC to DoLIDAR available.	To be continued with improvement and Contract Monitoring System (CMS) available as a part of BIMS Planning monitoring of bridges will be strengthened with introduction of IT based MIS system (CMS as part of BIMS)
Preliminary National Inventory for Motorable Bridges requirements is available	Developed National Inventory for Bridges	Initiate BIMS	LRBP Bridge Information Management System is in under progress	BIMS developed and commenced and update new and ongoing bridges
Output 5: Private sector have the capacity for the construction of local road bridges				
20 trained construction companies are available for bridge construction works.	Developed 20 construction companies	-	Approach to transfer technology in false work, pile foundation identified and initiated	Approach to transfer of technology in false work, pile foundation will be done through about 5 construction companies
10 trained consulting firms are available for bridge constriction works.	Developed 10 consulting firms	-	Identified few training need for local Consultants	About 5 Local Consultant will be trained in new concept of bridge design (Composite)
4 Educational institute adopt bridge building in their Engineering syllabus	4 Educational institutes	Initiate to adopt bridge building syllabus in educational institutes	Received request for collaboration in B. E.(Civil) final year student's bridge design project work from IOE Pulchowk campus and ACEM Advance College of Engineering and Management Received request for support to M. Sc. Research Thesis in Bridge Engineering. This year seven students out of 20 have proposed research thesis in bridge.	Support to 2 Educational institute research students and policy of internship (5 persons) is started

Annex 9: DoLIDAR: Proposed District-wise Budget details for the FY-2069/070

Ba.Si.No.: 365831

NRs = '000 Thousand

SN	Name of Office	District	Community Access Improvement Programme			Local Roads Bridges of Local Level			Total		Grand Total
			GoNs VAT Payment	Foreign Direct Payment	Total	GoN	Foreign TA	Total	Sources		
									GoN	Foreign Donors	
1	District Development Committee	Taplejung									
2	District Development Committee	Panchathar									
3	District Development Committee	Illam				15000		15000	15000		15000
4	District Development Committee	Jhapa				9600		9600	9600		9600
5	District Development Committee	Sankhuwasabha									
6	District Development Committee	Terahathum				8000		8000	8000		8000
7	District Development Committee	Bhojpur									
8	District Development Committee	Dhankuta									
9	District Development Committee	Sunsari									
10	District Development Committee	Morang				16000		16000	16000		16000
11	District Development Committee	Solukhumbu				8000		8000	8000		8000
12	District Development Committee	Khotang				8000		8000	8000		8000
13	District Development Committee	Udayapur				8400		8400	8400		8400
14	District Development Committee	Okhaldhunga				8000		8000	8000		8000
15	District Development Committee	Saptari				10000		10000	10000		10000
16	District Development Committee	Siraha				10000		10000	10000		10000
17	District Development Committee	Dhanusha				12000		12000	12000		12000
18	District Development Committee	Mahottari				12000		12000	12000		12000
19	District Development Committee	Sarlahi									
20	District Development Committee	Sindhuli									
21	District Development Committee	Ramechap									
22	District Development Committee	Dolkha									
23	District Development Committee	Sindhupalchowk									
24	District Development Committee	Rasuwa				8000		8000	8000		8000
25	District Development Committee	Dhading				10000		10000	10000		10000
26	District Development Committee	Nuwakot									
27	District Development Committee	Kathmandu				10000		10000	10000		10000
28	District Development Committee	Lalitpur				12000		12000	12000		12000
29	District Development Committee	Bhaktapur				15000		15000	15000		15000

30	District Development Committee	Kavrepalanchowk				8000		8000	8000		8000
31	District Development Committee	Makawanpur									
32	District Development Committee	Rautahat				15000		15000	15000		15000
33	District Development Committee	Bara				8000		8000	8000		8000
34	District Development Committee	Parsa				10000		10000	10000		10000
35	District Development Committee	Chitwan				15000		15000	15000		15000
36	District Development Committee	Nawalparasi				10000		10000	10000		10000
37	District Development Committee	Rupandehi				10000		10000	10000		10000
38	District Development Committee	Kapilvastu									
39	District Development Committee	Arghakhanchi				15000		15000	15000		15000
40	District Development Committee	Palpa				25000		25000	25000		25000
41	District Development Committee	Gulma				15000		15000	15000		15000
42	District Development Committee	Syanja				15000		15000	15000		15000
43	District Development Committee	Tanahu									
44	District Development Committee	Gorkha									
45	District Development Committee	Manag									
46	District Development Committee	Lamjung				5000		5000	5000		5000
47	District Development Committee	Kaski				20000		20000	20000		20000
48	District Development Committee	Parbat									
49	District Development Committee	Baglung				15000		15000	15000		15000
50	District Development Committee	Myagdi									
51	District Development Committee	Mustang									
52	District Development Committee	Mugu									
53	District Development Committee	Dolpa									
54	District Development Committee	Humla									
55	District Development Committee	Jumla				20000		20000	20000		20000
56	District Development Committee	Kalikot									
57	District Development Committee	Rukum									
58	District Development Committee	Rolpa									
59	District Development Committee	Pyuthan									
60	District Development Committee	Dang				8000		8000	8000		8000
61	District Development Committee	Salyan									
62	District Development Committee	Banke				15000		15000	15000		15000
63	District Development Committee	Bardiya				9000		9000	9000		9000
64	District Development Committee	Surkhet									
65	District Development Committee	Jajarkot				7000		7000	7000		7000
66	District Development Committee	Dailekh				14000		14000	14000		14000

67	District Development Committee	Kailali				11000		11000	11000		11000
68	District Development Committee	Doti				8000		8000	8000		8000
69	District Development Committee	achham				6000		6000	6000		6000
70	District Development Committee	Bajura									
71	District Development Committee	Bajhang									
72	District Development Committee	Darchula									
73	District Development Committee	Baitadi									
74	District Development Committee	Dadeldhura				5000		5000	5000		5000
75	District Development Committee	Kanchanpur									
76	Additional for New Districts Bridges					135000		135000	135000		135000
	Local Bridge conditional grant					604000		604000	604000		604000
77	LRBSU	Lalitpur					200000	200000		200000	200000
	Administrative current expenses										
A	Local Bridge Section	Lalitpur				2500		2500	2500		2500
Total current amount						606500	200000	806500	606500	200000	806500
	Community Access Improvement Programme Road Bridge (Mahottari, Sindhuli, Ramechhap, Sindhupalchowk/ Kavre amount no. 29611)	Lalitpur	75000	410000	485000				75000	410000	485000
1	Local Roads Bridges of Local Level (Central Budget amount no. 29611)	Lalitpur				126000		126000	126000		126000
Total Capital			75000	410000	485000	126000		126000	201000	410000	611000
Grand Total			75000	410000	485000	732500	200000	932500	807500	610000	1417500
		LRBP Total				**732500**		**732500**			**732500**

…….
Prepared Officer's Signature
Date:

……
Project Chief's Signature
Date:

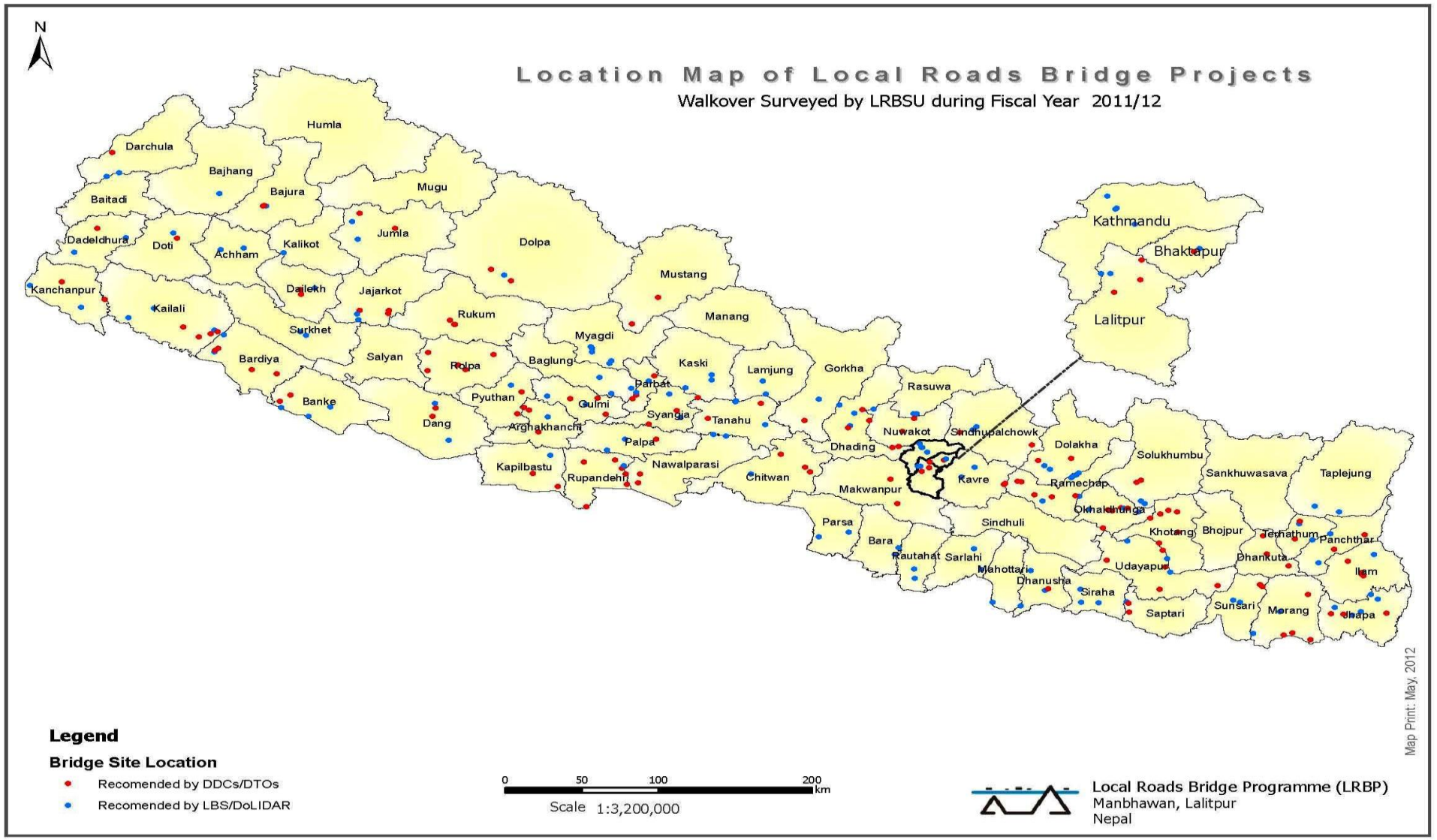
……
Department Chief's Signature
Date:

……..
Certifier's Signature
Date:

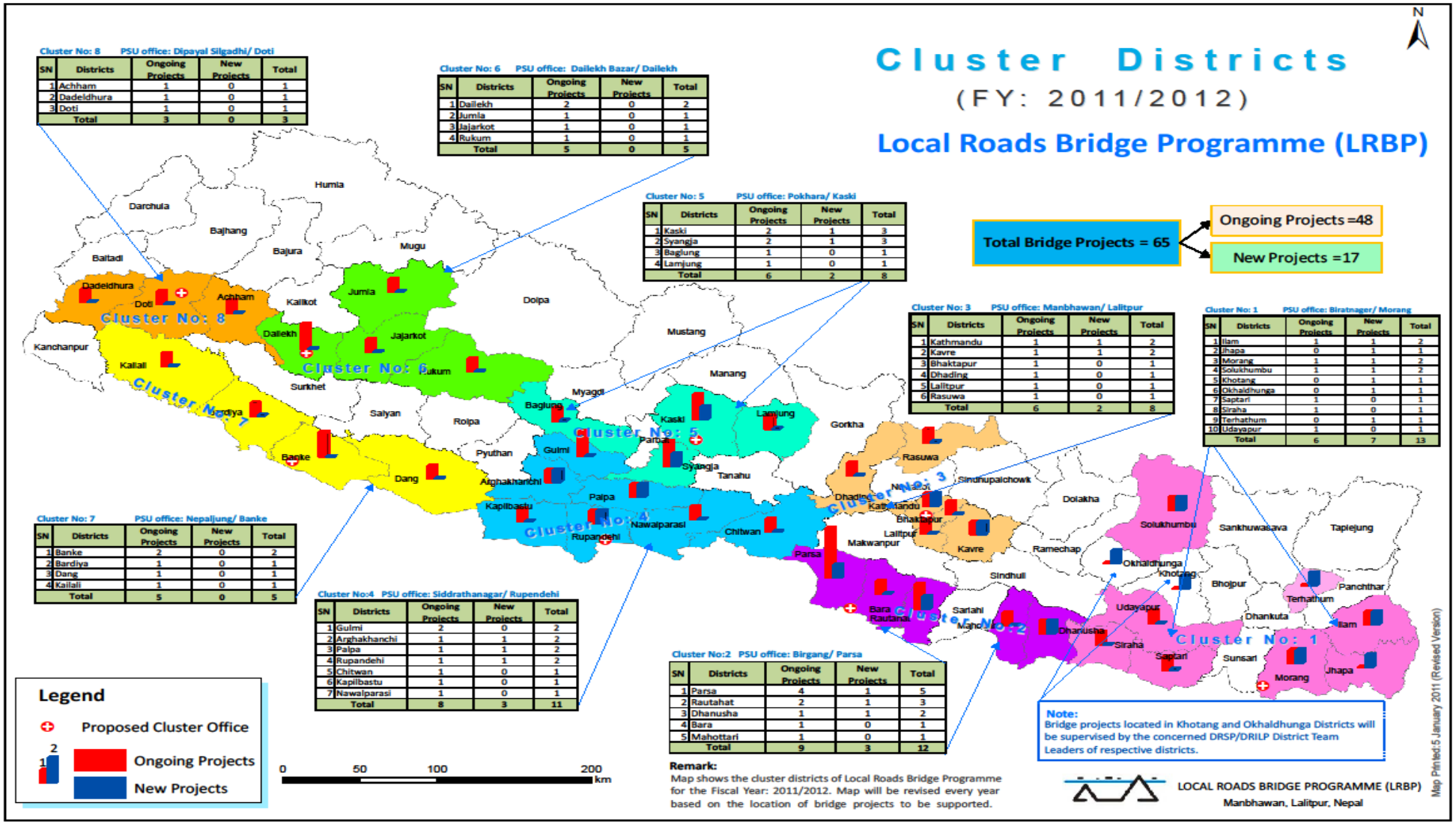
Annex 10: List of Bridges (Bridge Information and Management System of LRBSU)

SN	District	Total no. of Bridge	Under construction (Existing)	Under construction (New)	Design varification	New design
1	Achham	3			1	
2	Arghakhanchi	29	1		4	
3	Baglung	5		1	2	
4	Bajhang	2				
5	Bajura	3				
6	Banke	18	2		1	1
7	Bara	5		1		
8	Bardiya	19	1		1	
9	Bhaktapur	6		1	2	
10	Chitwan	9	1		1	4
11	Dadeldhura	6			1	3
12	Dailekh	6	2		1	
13	Dang	6	1		1	
14	Darchula	3				
15	Dhading	19	1		1	
16	Dhankuta	5			1	
17	Dhanusha	17	1		1	3
18	Dolakha	8			1	
19	Dolpa	3				
20	Doti	4	1		1	
21	Gorkha	5			1	
22	Gulmi	19	1		2	1
23	Humla	7				1
24	Ilam	9	1	1	1	
25	Jajarkot	6				2
26	Jhapa	16		1	2	2
27	Jumla	7	1		4	1
28	Kailali	16	1		1	4
29	Kalikot	1				
30	Kanchanpur	5			1	1
31	Kapilbastu	14	1		1	1
32	Kaski	15	2		3	2
33	Kathmandu	10			2	1
34	Kavre	14	1		1	2
35	Khotang	9			1	
36	Lalitpur	11		1	3	
37	Lamjung	6		1	2	
38	Mahottari	5	1		1	1
39	Makwanpur	10			3	5
40	Manang	5				
41	Morang	38	1		1	9
42	Mustang	18			1	
43	Myagdi	5			1	
44	Nawalparasi	11	1		1	4
45	Nuwakot	9			1	
46	Okhaldhunga	13			2	
47	Palpa	11			3	1
48	Panchthar	6				
49	Parbat	13			1	
50	Parsa	12		1		2
51	Pyuthan	5			1	1
52	Ramechap	17		1	1	
53	Rasuwa	5	2			
54	Rautahat	8	1	2	2	4
55	Rolpa	13			2	1
56	Rukum	14		1	3	1
57	Rupandehi	11		2	2	2
58	Saptari	7			1	
59	Sarlahi	6			1	
60	Sindhuli	3				
61	Sindhupalchov	17			1	2
62	Siraha	5			1	1
63	Solukhumbu	6	2		1	1
64	Sunsari	10			3	1
65	Surkhet	7				
66	Syangja	11		1	3	1
67	Tanahu	8			1	1
68	Taplejung	2				
69	Terhathum	5			1	1
70	Udayapur	9	1		2	1
	Total	671	28	15	86	69

Annex 11: Location Map of Local Roads Bridge Projects: Walkover Survey by LRBSU during Fiscal Year 2011/12



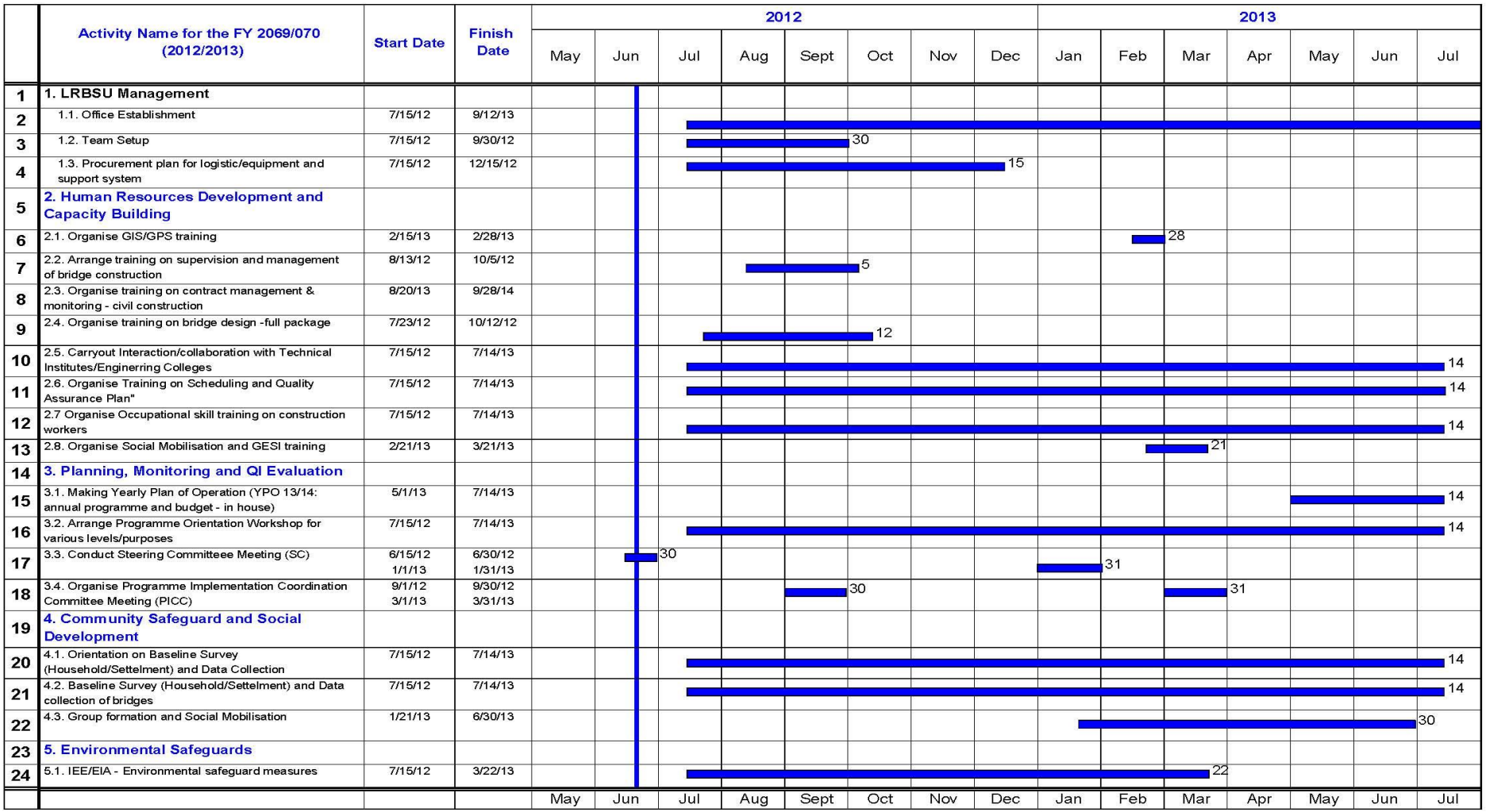
Annex 12: Location Map of Local Roads Bridge Projects: Construction and Supervision of ongoing bridges under technical assistance by LRBSU (FY 2011/2012)



Annex 13: LRBSU Work Schedule (Implementation Plan)

Annex 9: LRBSU Work Schedule (DRAFT-Programme Implementation Plan)

	Activity Name for the FY 2069/070 (2012/2013)	Start Date	Finish Date
1	**1. LRBSU Management**		
2	1.1. Office Establishment	7/15/12	9/12/13
3	1.2. Team Setup	7/15/12	9/30/12
4	1.3. Procurement plan for logistic/equipment and support system	7/15/12	12/15/12
5	**2. Human Resources Development and Capacity Building**		
6	2.1. Organise GIS/GPS training	2/15/13	2/28/13
7	2.2. Arrange training on supervision and management of bridge construction	8/13/12	10/5/12
8	2.3. Organise training on contract management & monitoring - civil construction	8/20/13	9/28/14
9	2.4. Organise training on bridge design -full package	7/23/12	10/12/12
10	2.5. Carryout Interaction/collaboration with Technical Institutes/Enginerring Colleges	7/15/12	7/14/13
11	2.6. Organise Training on Scheduling and Quality Assurance Plan"	7/15/12	7/14/13
12	2.7 Organise Occupational skill training on construction workers	7/15/12	7/14/13
13	2.8. Organise Social Mobilisation and GESI training	2/21/13	3/21/13
14	**3. Planning, Monitoring and QI Evaluation**		
15	3.1. Making Yearly Plan of Operation (YPO 13/14: annual programme and budget - in house)	5/1/13	7/14/13
16	3.2. Arrange Programme Orientation Workshop for various levels/purposes	7/15/12	7/14/13
17	3.3. Conduct Steering Committeee Meeting (SC)	6/15/12 1/1/13	6/30/12 1/31/13
18	3.4. Organise Programme Implementation Coordination Committee Meeting (PICC)	9/1/12 3/1/13	9/30/12 3/31/13
19	**4. Community Safeguard and Social Development**		
20	4.1. Orientation on Baseline Survey (Household/Settelment) and Data Collection	7/15/12	7/14/13
21	4.2. Baseline Survey (Household/Settelment) and Data collection of bridges	7/15/12	7/14/13
22	4.3. Group formation and Social Mobilisation	1/21/13	6/30/13
23	**5. Environmental Safeguards**		
24	5.1. IEE/EIA - Environmental safeguard measures	7/15/12	3/22/13



	Activity Name for the FY 2069/070 (2012/2013)	Start Date	Finish Date	2012								2013						
				May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
25	5.2 Prepare Environmental safeguard measures formats/guidelines (in house)	7/15/12	7/14/13															14
26	**6. Bridge Management (Technical)**																	
27	6.1. New bridge construction	7/15/12	7/14/13															14
28	6.2. Design services for new bridges	7/15/12	7/14/13															14
29	6.3. Design varification of bridges that has already been designed by DoLIDAR through outsourcing	7/15/12	7/14/13															14
30	6.4. Selection of new pilot bridges	7/15/12	7/14/13															14
31	6.5. Develop Motorable bridge technical norms and standards (In-house)	7/15/12	7/14/13															14
32	**7. General Services**																	
33	7.1. Consulting services (BIMS service, Social & Monitoring Services, Hiring Consultant for support bridge design-Central Level)	7/15/12	7/14/13															14
34	7.2. Community Saferguard/Social Development and Monitoring Services	7/15/12	7/14/13															14
35	7.3. IT and GIS services	1/1/13	7/14/13															14
36	7.4. Human resources development and capacity building services	7/15/12	7/14/13															14
				May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul

Annex 14: Capacity Building Plan for Stakeholders

Who	Content	Activities
MLD/DoLIDAR: • Orientation on programme (bridge section staffs plus other programme of DOLIDAR) • Implementation of the projects with planning sequences/ phase wise • Procurement/Contract Management • Quality Management system • Capacity of Bridge Design and Design Review	• Technical knowledge in bridge engineering • Proper understanding of procurement processes	• Trainings on (at centre) procurement of works and consulting services • Various Trainings on (at centre) bridge engineering (design / construction super vision)
DDC/DTOs: • Programme orientation • Management of bridge demands and prioritization • Procurement / Contract Management • Quality Assurance Plan / Quality Control System	• Knowledge of Bridge Demand Management, selection/ prioritization at district level • Knowledge in Bridge Design Reviews • Quality Assurance methods	• Workshop on programme orientation (at regional levels) • Training in bridge design • Training in QAP implementation • Training in Procurement Management
VDCs: Post bridge construction management	• Bridge status supervision	• Will be done next year only
Users Committees: • Skills related with bridge construction	• Skill enhancement	• Regional level training on skilled labours (Bar bending, concreting, mason)
Consultants/Consulting Firms: • Quality Management system • Cost effective bridge design • Introduction simple/efficient construction methods	• Updating the knowledge in bridge design (cost efficient and innovative)	• Organize work-shop on design & construction of bridges using new design and construction approaches. • On the job training to consultants by LRBSU engineers in new design concepts. • Participation in bridge design trainings organized by LRBSU
Contractors: • Labour based construction knowledge • Environmental Awareness • Quality control necessity	• Enhancement in Quality Control Planning • Imparting the knowledge in environment friendly construction methods • Introduction to Labour based construction technology	• Participation in trainings organized for DoLIDAR/MLD and DDC/DTO engineers • A tailor-made training regarding environmental issues in construction projects
Academic Institutions: • Bridge engineering focused courses	• Assistance in bridge engineering related course development • Initiate Internship or research support programmes	• Meetings / workshops, interaction with the academic institutes. • Engage potential bridge engineers /researchers on pilot projects, site supervision, designing etc.