COUNTRY REPORT OF THE UNITED REPUBLIC OF TANZANIA IN THE 48TH MEETING OF THE TECHNICAL COMMITTEE OF THE RCMRD ADDIS ABABA ETHIOPIA 10TH -11TH NOVEMBER, 2014.

Boundaries

This year the Department of Surveys and Mapping carried out reaffirmation of 138 km. of the international boundary between the United Republic of Tanzania and the Republic of Burundi. This boundary was established on 5th August, 1924 by the then "Anglo-Belgian Boundary Commission". The boundary is about four hundred and fifty kilometers (450km) long consisting of fifty eight (58) boundary pillars as from BPI situated on the Eastern shore of Lake Tanganyika to BPLXVIII on the South Western arm of the Mwibu River. There are also thalwegs, hills, and rivers, crests of spurs, ridges, escarpments and straight lines that form part of the boundary in between the pillars.

In the past decade there has been population increase along the border region as well as cross-border socio-economic activities that includes trading, farming, grazing as well as mining activities. These, along with rough topography that is present in most of the boundary areas as well as long distances between some of the boundary pillars makes the visual perception of the present boundary very difficult to the local community.

The bilateral meetings by JTC resulted into inspection of the boundary where assessment of boundary pillars and developments along the border were carried out. Based on their observations, the JTC recommended to the Joint Committee of Officials (JCO) on the best work-plan to be adopted in the reaffirmation process. The JCO received the JTC report and approved the boundary re-affirmation plan and later on forwarded their recommendations to the Council of Ministers (COM) meeting on 24th October, 2013; for their decision on behalf of the two Governments. The plans were approved allowing the Joint team of experts to start working on the first phase of the boundary on 15th April, 2014. This phase is about 150 km long and stretches from BPXXXVIII (in Muruvyagira village) to BPLVIII (in Kasange village) and thereafter along the Mwibu River to its confluence with Kagera River all of which are in Ngara district. By 10th July, 2014 the first phase had been

completed including erection of 90 Intermediate Boundary Pillars (IBPs) and 254 Buffer Zone Pillars. Although a good coverage was made and there was a plan to continue with the remaining portion of the border, lack of funds prevented continuation of the work.

Tanzania/Mozambique

This one is a boundary that is being reaffirmed using the support from GIZ. Although this work started some few years back, progress has not been encouraging due to various setbacks. One of the impediments is late release of funds on the part of government contribution which causes teams to go for fieldwork at the time when rains are about to start giving very little room for field work rendering a number of days to be unproductive.

The land part is 51 km. where densification of boundary pillars has been carried out by erecting intermediate pillars. It was intended to carry out ground photo control survey for 40 points. At the time of this report the number of points already completed is 21 and the remaining 19 are supposed to be done this year. It is not known how much of the work will be covered given the fact that even this year the team went there at the beginning of rainfall.

Tanzania/Kenya is a boundary for which three meetings have been held and resolutions made. During the last meeting which was held in Arusha it was resolved that survey of the Kenya/Tanzania border would begin in August for 40 weeks continuously non-stop. The work plan could not be implemented because of unavailability of funds.

In the meantime we are working on the memorandum of understanding that was prepared by Kenya in a bid to strengthen border relations. The MoU will be out soon with a proposal for a venue and time for a meeting.

Cross border cooperation.

There has been effort to identify areas where interaction of people calls for some kind of cooperation to facilitate border transaction and procedures. Tunduma/Nakonde border is the area where progress has been made and One Stop Border Post (OSBP) is in the final touches of its establishment. Other potential areas for cross border cooperation are Namanga (Kenya/Tanzania) border and Holili which is also between Kenya and Tanzania. Another area with such potential is Kyela at the border of Tanzania/Malawi. Discussions are

already underway with Ardhi University to look into a way to introduce a course on cross border cooperation.

Geodetic Network

Over the past four years Tanzania has been working on establishment of geodetic network in three categories namely zero order, first order and second order. All observations have been carried out and computations for zero and first order control points have been completed. Computations for the second order geodetic network is going on. Under the Private Sector Competitiveness Project (PSCP) the network will be verified and during the same period, observations will be made to join the old controls with the new ones in which transformation parameters will be computed. Studies to specify the geodetic and mapping framework for land administration are also being conducted. These studies will be undertaken under contract and are funded as part of the follow-on project to the PSCP. In the pipeline is the Finalization of implementation of the new geodetic framework, on-going maintenance of the network, design and implement the transfer of existing mapping and data to the new datum, capacity building and public awareness campaign to support move to the new system. It is also desired to design and implement a costeffective approach to producing large and medium scale mapping and develop operational policy and procedures to share this basic information. Finally, the computation of a new geoid using gravity data obtained from aerial gravity survey that was carried out to complement the geodetic network, has been completed.

Equipment

The department of Surveys and Mapping is intending to purchase new survey equipment and mapping software in preparation for implementation of a massive survey and mapping of land parcels. It is expected under Big Result Now (BRN) in three years' time, 10 million land parcels will be surveyed. In order to achieve the desired target, photogrammetric methods will also be employed in identification of individual land parcels using aerial photographs as well as high resolution satellite imagery.

There is however a challenge to the idea of purchasing survey equipment. In the past surveyors bought equipment which was comparatively cheaper and durable. Today the equipment in the market is very expensive and not durable. To make matters even worse there is no after sale service. It becomes very costly for these poor nations to have to replace equipment which could have otherwise undergone just service and or repair. This is an area which RCMRD can do something to at least come out with an advice to those intending to purchase equipment. It goes without saying that RCMRD must strengthen the engineering section so that at any given moment there are people and machines capable of handling the problems.

Projects

The Surveys and Mapping department is implementing a number of projects. One of the projects is ILMIS which is Integrated Land management System. This project is being implemented as a measure to improve data storage and sharing thus giving assurance to land tenure security. This project will be implemented in phases. The first phase to also act as a pilot area is the Kinondoni District in Dar es Salaam. Under this project being implemented under the Private Sector Competitiveness Project (PSCP) aerial photography will be carried out for Urban areas and for Rural areas satellite imagery will be employed. The idea is to digitize all existing cadastral plans and link them to a georeferenced digital base map

Capacity Building

In capacity building our staffs are getting training on the job as well as in class. Many technicians are going for degrees in different Universities to become professionals or at least to be professionally recognized. However, there are some areas where need for training is higher as there are no local training institutions. There is a very serious problem with Photogrammetry because there elapsed a time without being very active in mapping and even acquisition of new photographs was not being done. This caused those who could have learnt on the job to miss that opportunity. Worse still most of the personnel with photogrammetric knowledge and skills are catching up with retirement age so they are not leaving knowledgeable people behind.

Apart from lacking succession plan in Photogrammetry, there is also a problem with printing because the time during which no maps were being produced printing was also down. Since we are now having a big printing machine that is capable of printing maps and other documents in big volumes, it is necessary to train. The challenge is the same that most of personnel with knowledge and skills in this area have retired and no succession plan was left behind.

Law Review

Land Survey law that is in use was written way back 1957. The changes that have taken place including technological advancement calls for review of the law. Attempts to review the law began some five years back by formulating a policy but had always ended in being rejected. Recently it was suggested that because we already have a Land Policy of 1995 in place there is no need for a new policy but rather use the existing policy to review the Land survey Ordinance of 1957 now referred to as Land Survey Act no. 324. The review will be carried out with the support of World Bank Funds under PSCP.

Commitments

For next year we will continue with reaffirmation of international boundaries. At present we have a commitment to reaffirm the boundary among four countries in Lake Tanganyika. Purchase of Satellite imagery for the lake has been initiated by the procurement people. Once the imagery is availed the four countries namely Zambia, DRC, Burundi and Tanzania will embark on the reaffirmation exercise. This undertaking has got a training component in it which supports our desire to build capacity whenever a slight opportunity is available. It is also our desire to tie the old coordinate system into the newly established geodetic network for the purpose of establishing transformation parameters so as to bring the two systems into harmony.

Thank you.