

## The Development of Large-scale Upland Farming and Farmland Use in Hokkaido : A Case Study of Otofuke Town

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Japanese agriculture falls into a decline. Especially, farmland resources very important as a factor of production are decreasing. From 1961 to 2010, farmlands decreased by 25% in Japan. On the other hand, in Hokkaido, farmland is not decreasing so much.

This presentation tries to explain the characteristics of large-scale upland farming and condition of farmland use in Otofuke town.

Keywords: Farmland use, Upland crops, Wheat, Large-scale Farming, Otofuke Town

## Change of forest use and current state of coppice forest in Nenoshiroishi near Sendai

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Coppice forest had been repeatedly felled in an interval of about 15 to 30 years in order to produce and provide fuel wood and charcoal. A charcoal production worker produced 1,500kg of the charcoal in the winter of 2009-2010 in Nenoshiroishi near Sendai. The felled area is approximately 800 square meters. The amount of production of charcoal was approximately 3,000,000kg per year in Nenoshiroishi in the 1930s, therefore the felled area is calculated approximately 1.6 square kilometers per year at that time. After the fuel revolution in the late 1950s and the early 1960s, felled area rapidly decreases, and trees have grown to large sized. In recent years, mass mortality of oak trees has been expanding rapidly in Nenoshiroishi. Growth of the tree is considered to one of the causes of mass mortality of oak trees.

Keywords: coppice forest, forest use, mass mortality of oak trees, Sendai

## Utilization of local resources in agricultural cooperatives in Inner Mongolia,China

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This study considers about the regional action mainly on the sales of dried beef established with agricultural cooperative modality in Xilingol League, Inner Mongolia Autonomous Region, China that it lived by mainly in live stock farming before 1990s. Agricultural cooperative in China is a new co-operative association institutionalized from 2007 as a position improving local economy. Dried beef is winter excellent products in this area. The agricultural cooperative targeted in this study produces dried beef by oneself, and sells it by oneself at the store established in Xilinhot City that is local metropolis of Xilingol League. It is administered by 25 households live in Bulgan County. They got an adjunct to 300,000 yuan from the government in 2009 to establish this cooperative. This study discusse about the business processes after the establishment of this cooperative and the relations with local resources.

## Placing sediment budgets in the socio-economic context for management of sedimentation in Lake Inle, Myanmar

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In soil erosion and sedimentation research in developing countries, scientists are expected to be better involved in quantifying mechanisms and rates of sediment movement and objectively demonstrating their impacts. Soil erosion and sedimentation in the ca. 3,800km<sup>2</sup> Lake Inle catchment, Myanmar have been of both local and national concern given the significance of the lake to the economy, environment, and culture. Sediment budgets that include a focus on different sedimentation rates in various sink environments around and in the lake were constructed for this lake catchment. The sediment budgets showed that deltas stored more than half of the sediment transported to the lake area, and that, despite the relatively smaller storage mass, the highest specific storage was found at river mouths. Socio-economic assessment identified diverse perspectives on impacts of sedimentation. Of those perspectives, increasing difficulty in water transportation was recognized as a common, significant problem among stakeholders. Proposals for management of sedimentation therefore emphasize that a priority should be given to controlling sedimentation at river mouths.

### <Reference>

Furuichi,T., Wasson, R.J., 2011. Placing sediment budgets in the socio-economic context for management of sedimentation in Lake Inle, Myanmar (Burma). In: *Sediment Problems and Sediment Management in Asian River Basins* (ed. Walling, D.E.), IAHS Red Book 349, 103-113.

Keywords: sedimentation, sediment budget, socio-economic assessment, Lake Inle, Myanmar

## Regional Governance of Forest and its Fringe - case of South India -

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In recent years, on a global scale, forest issues are being "organized". The "facts" of a serious deforestation and "needs" of appropriate protection, as the international public opinion, becomes the general framework of forest policy in each country and region, and under the framework various policies have been implemented. In the late of the 1980s, it may be said that the short turn from the timber-oriented forest government to the community based forest management and governance is a beginning of such a trend. Since the 1990s, many of research such as various case studies of the present situation of forest, a critique of forest policies and foreign aids, and theoretical studies including the commons theory, have been accumulated.

In India, Joint Forest Management (JFM) which was launched at the beginning of 1990s has been showing a certain "recovery" in the forest rate. However, since the late 1990s, various problems such as land acquisition and competition and the human ? wildlife conflict spout out. Indeed, under the JFM program, we might be able to recognize the results of certain "improvement" in both the macro level of forest rate recovery and micro level of participatory activities in village. On the other hand, it has been overlooked the issues related with the forest "region" including the forest and its fringe areas. The success of forest policy, so to speak, has dug out the forest "region" issues.

Even if the community based forest management will be developed continuously, the problem of the forest "region" must be considered with a peculiar frame of its own. As the forest "purification" by the setting of "National Park" and an enclosing of legal and/or physical, the doughnut-shaped chaotic area around the forest appears like sprawling phenomenon in the sub-urban area.

In this study, we are trying to overview of the problems in the forest "region" based on our field survey in Karnataka, India.

Keywords: Protected Areas (PAs), National Park, Region, Governance, India

## Hydrologic Environment in Rangwa Caldera on Lake Victoria, West Kenya

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In this presentation, we discuss on the hydrologic and physical geographic environment of sustainable settlements in the Rangwa Caldera, situated on the coast of the Lake Victoria, west Kenya.