日本熱帯農業学会
熱帯農業研究
第11巻 別号1

日本熱帯農業学会第123回講演会・総会

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V. 第204回研究集会要旨

2018年3月10日（土）
11日（日）

会場 玉川大学 大学教育棟2014
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(1信州大学農学部, 2AST Foundation) |
| 10:30 - 10:45 | 7. ミクロネシア連邦ポンペイ州ビンガラップ島における長期間における食事調査結果-山本宗実 (鹿児島大学国際農業教育研究センター) |
| 10:45 - 11:00 | 8. キリマンジャロ山地伝統農業におけるバナナ栽培と人々の暮らし *一ノ瀬俊理1, 久保田豊2, Method Kilasara3, 舟川光也1 (京大院地球環境2, 名大農学国際協力3, ソコイネ農業大) |
| 11:00 - 11:15 | 9. Farmers' Initiative Technologies in Rice Production after Green Revolution in Bangladesh *Muhammad Salim1, Kazuo Ando2, Haruo Uchida2 (1Bangladesh Agricultural University, Currently CSEAS, Kyoto Univ., 2CSEAS, Kyoto University) |

ボスターフェア (504教室 11:15 〜 12:15)
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総会 (551教室 13:15 〜 13:45)
議事
イ. 平成29年度事業報告
ロ. 平成29年度決算報告
ハ. 平成29年度会計監査報告
ニ. 平成30年度事業計画案
ホ. 平成30年度予算案
ヘ. その他

日本熱帯農業学会奨学生奨励賞受賞式 (13:45 〜 13:55)
受賞記念講演 (521教室 14:00〜14:40)
奨励賞 NTCインターナショナル株式会社 久保田准平
エジプト、ナイジェルにおける節水栽培・食料増産のための間作の効果とその技術開発
休憩 (14:45 〜 15:00)
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西村美彦「これまでの熱帯農業における我が国の技術協力の経験と将来」
暁好恵美子「SDGsに向けた熱帯農業におけるJICAの取り組み」
田中章彦「農業分野におけるJICAポランティアの取り組み」
町田堅一「民間企業の熱帯農業への展開」
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I. 種子形態の特徴と発芽特性

志水勝好・*西原平・朴柄宰・遠城道雄（鹿児島大学農学部）

P2. 鹿児島県における塩ストレスが油畑作物ヒマとナンヨウアブラギの生育および光合成速度に及ぼす影響

志水勝好*・*有馬達・*森田あす美・朴柄宰・遠城道雄（鹿児島大学農学部・筑波大学大学院生命環境科学研究科）

P3. 食用カンナ数種系統間の生育および根茎・デンプン収量の比較

*宮崎典・*大岩亜希斗・*山本由德・*上本元（高知大学農林海洋科学部・高知県立牧野植物園）

P4. ネパール中部地域におけるオフシーズン野菜栽培への取り組み～カスキ郡ハングサーブール地区のトマト栽培を事例として～

*真田篤史・中曽根勝重・浄間洋（東京農業大学国際食料情報学部）

P5. ダイジョとナガイモにおける甜度の比較

新小田あつさ・*柳口智春・朴柄宰・志水勝好・遠城道雄・北原兼文（鹿児島県農業技術研究センター・鹿児島大学農学部）

P6. ミャンマーの山岳・高原・平地地帯におけるHibiscus属植物“CHINBAO”の栽培と利用

*黒崎麻美・*和久井健司・*菊野日出彦・*吉田恒樹・*入江憲治・*西川芳昭・*Ohm Mar Saw（東京農業大学・龍谷大学・ミャンマー農業灌漑省農業研究所）

P7. ハラフケ原木クスギ枝でのヤマチの生育状況～宮崎県東臼杵郡松本町との比較を例として～

*高橋真紀・*近藤友大・鈴木玲治・竹田晋也（京都大学大学院アジア・アフリカ地域研究研究科・宮崎大学地域資源開発学部・京都学園大学バイオ環境学部）

P8. University's Potential to Cope with Depopulation and Abandoning Farming: Lesson from Bangladesh Agricultural University Extension Center (BAUEC)

Kazuo Ando・Haruo Uchida・Muhammad Salim・Yoshio Akamatsu（CSEAS, Kyoto University, BAU, Bangladesh (Presently CSEAS)）

P9. ベトナムにおけるトウガラシの探索、収集および評価

*小森健太・Quoc Trung・Nguyen Minh・Pham Van Cuong・坂上潤一（鹿児島大学農学部・ベトナム国立農業大学）

P10. サラミス（Hylocereus undatus）花粉の長期保存に関する研究

松島大朗・*井上広大・水野宗衛（玉川大学農学部）
University's Potential to Cope with Depopulation and Abandoning Farming: Lesson from Bangladesh Agricultural University Extension Center (BAUEC)

Kazuo Ando*, Haruo Uchida*, Muhammad Salim**, Yoshio Akamatsu*
*CSEAS, Kyoto University, **BAU, Bangladesh(Presently CSEAS)

キーワード：過疎、離農問題、パングラデシュ農業大学、ランド・グランジ・大学

Introduction

At this moment, in Japan, the university students are much expected to contribute to supporting the marginal village communities in the depopulated area in Japan. The Ministry of Education, Culture, Sports, Science and Technology(MEXT), the government of Japan has leaded the social contribution of the universities by the University Center of Community (COC) program since 2013. Accordingly, Kochi University and Ehime University have recently started the faculty of regional collaboration and the faculty of collaborative regional innovation, respectively, to conduct the higher education and research for enhancing the social contribution in the field of rural re-vitalization with local governments and local communities. The depopulation and aging problem have been serious to be looked over. The marginal community village is defined that the percentage of the people older than 65 years is more than 50% of total population of the village community. In 2015, the percentage of the marginal village community is about 20% (15,568) among the 75,622 village communities located the depopulated area of 1,028 local governments (http://www.tochikatsuyou.net/column/genkai-syuraku/). In 2017, the 817 local governments are recognized as the depopulated local government against the 1,718 of the total local governments in Japan (http://www.kaso-net.or.jp/kaso-about.htm/kasoabout02).

Why is the universities and the new faculty (not the faculty of agriculture) expected to take a role in the regional collaboration and local re-vitalization? Hypothetically, we can explain that the local re-vitalization programs are not only agricultural related but also much cultural, educational, social welfare, volunteer works, tourism, business oriented in rural Japan. Among these, the programs of culture and volunteer works may be most important to sustain the depopulated village communities. The model of direct involvement in local re-vitalization or rural development is not original in Japan. In Bangladesh, Bangladesh Agricultural University, Mymensingh and Bangladesh Academy for Rural Development, Comilla are institutionally involved for extension in the Upozila (sub-district) where they are located. BAU and BARD have been established in 1959 and 1961 respectively during the East Pakistan period under the international cooperation program between East Pakistan and USA. The Texas A&M University assisted BAU (https://en.wikipedia.org/wiki/Bangladesh_Agricultural_University). On the other hand the Michigan State University assisted BARD (http://www.canr.msu.edu/afre/projects/pakistan_academies_for_rural_development_1957_1972). The state university of USA had played an important role in establishment of BAU and BARD. It may be noticed that USA government tried to introduce the experience of the state university for East Pakistan that time. If ahead of the conclusion, the GHQ (General Headquarters) in Japan after the second world war had also tried to introduce the model of the state university of USA for agricultural extension and rural development to Japan, but it was not realized. This paper firstly aims to explain the establishment history of Bangladesh Agricultural University,
and secondly to review the difference between the agricultural extension and rural development model between Japan and USA and its significance for historical development briefly.

**Methodology**

We have mainly employed the literature survey through internet and the interviews with the concerned people in Bangladesh Agricultural University Extension Office, Mymensingh as needed in 2017.

**Result and Discussion**

**BAU establishment:** The USAID collaboration linking with Texas A&M University provided remarkable initial support to capacity building through professional advisers, man power development (providing MS/PhD scholarships for newly recruiting academic staff) and laboratory equipment etc. Development work was supported through two IDA Credit Agreements signed subsequently between the Government and the World Bank in 1964 and 1966. Based in a traditional rural setting encompassing nearly 500 ha of fertile land stretching along the western bank of the mighty aquatic resource rich Brahmaputra river was an ideal place for a growing agricultural university. The initial idea was to run BAU in Land Grant system, which was later converted into BAU Extension Approach.

**Development of BAU Extension Approach:** After one and a half decade since its inception, BAU took the initiative for generating and transferring technologies to the farmers to reorient its teaching and research programs in the context of Bangladesh. To perform this job the Bangladesh Agricultural University Extension Project has been established in 1976 and subsequently named as BAU Extension Center (BAUEC) to connect rural people with BAU. The other government departments and NGOs are also considered for active collaboration in research and extension program with this center.

**Land Grant University Concept:** The Land Grant University (also called Land Grant College) is an institution of higher education in the United States designated by a state to receive the benefits of the Morrill Acts of 1862 and 1890. It intended to provide a broad segment of the population with a practical education that had direct relevance to their daily lives. The history of Land Grant University goes back to 1840s when concept of publicly funded agricultural and technical educational institutions first rose to national attention in USA. The Morrill Acts funded educational institutions by granting federally controlled land to the states for them to sell, raise funds, to establish and endow “land grant” to teach agriculture and mechanical arts. Agricultural and Mechanical College of Texas (later renamed as Texas A & M University) for instance, was established in 1876 under the provision of the Land Grant Acts. Ultimately, most land grant colleges became large public universities that today offer full spectrum of educational opportunities in USA.

**Difference of Agricultural Extension and Rural Development between Japan and USA:** In the United States, Land Grand University becomes manager of subsidy relating to extension projects and the authority to consult with the federal government to decide the extension project's content. Therefore, the extension projects became the "extended education of the university for the people who did not attend the university. As a result, it was not necessarily limited to farmers and their families. Urban inhabitants were also be covered later. The projects covered the contents from cultivation technology to management technology, including rural development and nutrition education. On the other hand, in Japan, the extension projects became a part of the agricultural policies of the national or prefectural governments, so that the target was limited to farmers consisting of farmers and farmers' families. Cultivation technology was focused on and developed(市田（岩田）知子 1992「先進国における農業普及事業の動向—日本、アメリカ、ドイツを中心に—」46 巻第 2 号：131－157. から引用。発表者翻訳).
1. Introduction

1-1. Involvement of Universities to cope with the problem of depopulation in Japan

- The Ministry of Education, Culture, Sports, Science and Technology (MEXT) the government of Japan to lead the social contribution of the universities by the University Center of Community (COC) program since 2013.
- The faculty of regional collaboration of Kochi Univ. and the faculty of collaborative regional innovation of Ehime Univ., respectively, to conduct the higher education and research for enhancing the social contribution in the field of rural re-vitalization with local governments and local communities.
- The serious depopulation and aging problem has been overlooked. The marginal community village (限界集落) is defined that the percentage of the people older than 65 years is more than 50% of total population of the village community. In 2015, the percentage of the marginal village community is about 20% (15,568) among the 75,622 village communities located the depopulated area of 1,028 local governments (1). In 2017, the 817 local governments are recognized as the depopulated local governments against the 1,718 of the total local governments in Japan (2).
- The new faculty (not the faculty of agriculture) has been expected to take a role in the regional collaboration and local re-vitalization because the local re-vitalization programs are not only agricultural related but also much cultural, educational, social welfare, volunteer works, tourism, business oriented in rural Japan. Among these, the programs of culture and volunteer works are most important to sustain the depopulated village communities.

1-2. Model of Land Grand University of USA in Agricultural and Rural Development of Bangladesh (East Pakistan period)

- The model of direct involvement in local re-vitalization or rural development is not original in Japan. In Bangladesh, Bangladesh Agricultural University (Photo 1), Mymensingh and Bangladesh Academy for Rural Development, Comilla are institutionally involved for extension in the Upozila (sub-district) where they are located.
- BAU and BARD have been established in 1959 and 1961, respectively during the East Pakistan period under the international cooperation program between East Pakistan and USA. The Texas A&M University assisted BAU (3). The Michigan State University assisted BARD (4). The state universities of USA had played an important role in establishment of BAU and BARD. USA government tried to introduce the model of the state university of Land Grand University for East Pakistan that time.
- GHQ (General Headquarters) in Japan after the second world war had also tried to introduce the model of the state university of USA for agricultural extension and rural development to Japan, but it was not realized because of change of GHQ policy by USA Government in relation to Korean War.

2. Objective of the presentation

This paper firstly aims to explain the establishment history of Bangladesh Agricultural University, and secondly to review the difference between the agricultural extension and rural development model between Japan and USA and its significance for historical development briefly.

References

- http://www.chikatsuyou.net/column/genkai-syuraku/
- http://www.kaso-net.or.jp/kaso-about.html#kasoabout02
- https://en.wikipedia.org/wiki/Bangladesh_Agricultural_University
- https://www.tochikatsuyou.net/column/genkai-syuraku/