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Chandkarim Sarbik Gram Unnayan Samabaya Samity Limited : A Case Study

Md. Habibur Rahman¹

Abstract

The report highlights the impacts of different activities of Comprehensive Village Development Programme (CVDP) on socio-economic condition of the members of Chandkarim Sarbik Gram Unnayan Samabaya Samity formed under CVDP. It is a primary cooperative society having multi-dimensional activities. It dreams to become self-reliant with their own. So it opens its door for all people of the village irrespective of class and professions. They have been able to accumulate an investable capital by which they operate their credit programme. Training plays a vital role to make them aware and use of skill and technology. Training and their own fund together have created huge opportunities of employment and income generation. They procure support and services from the upazila level department. That means, the cooperative has been able to build a linkage with the nation building departments of the upazila. This is how Chandkarim cooperative society becomes self-managed self-financed and self-driven organization.

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Growth Performance and Profitability of Mono-sex Tilapia Cultivation in Pond

Md. Nurul Amin¹

Abstract

This paper is an outcome of research work of PGDRD course of RDA. The experiment was conducted to examine the growth performance and to calculate the profitability of mono-sex Tilapia cultivation in pond using two types of supplementary feed for a period of four months from July to October 2013. The study was carried out in six mini ponds of the Fish Hatchery Unit of the Rural Development Academy (RDA), Bogra each having water area of five decimal. The ponds under two treatments were stocked @ 150 mono sex tilapia fingerlings per decimal. The fingerlings were 30 days old and mean initial weight of 30.35 ± 2 gm.. Commercially made floating pellet feed was supplied to the ponds under treatment -1 and homemade feed composed of 25% mustard oil cake and 75% rice bran was supplied to the ponds under treatment -2. In both the treatments fishes were fed @ of 5% of body weight throughout the whole experimental period. Other management was same for both the treatments. In treatment-1 and treatment-2, the average temperature were 30.50°C and 31.25°C ; transparency were 25 cm and 22 cm; pH were 7.5 and 7.4 and dissolved oxygen content were 5.2 ml/l and 5.3 ml/l respectively. Average weight gain was 195.21 gm/fish and 140.40 gm/fish; average growth rate of individual fish was 1.62 gm/day and 1.17 gm/day in treatment 1 and treatment 2 respectively. The Specific Growth Rate (%/day) was found higher (2.18) in treatment -1 compared to treatment -2 (1.93). The survival rate (%) of fish was 96% and 94% in treatment -1 and treatment -2 respectively. Production of mono-sex tilapia after four months was 3032 kg/acre in treatment -1 and 2196 kg/acre in treatment -2. Food Conversion Ratio were 1.76 and 2.28 for treatment- 1 and treatment 2- respectively. The gross profit was obtained Tk. 3,63,840.00/acre from treatment- 1 whereas it was Tk. 2, 19,600.00 from treatment- 2. Operational cost was Tk. 3, 05,566.00 for treatment -1 whereas it was Tk. 1, 69,566.00 for treatment- 2. The net profit was Tk. 58,274.00/acre and Tk. 50,034.00/acre from treatment -1 and- 2 respectively. The culture of mono sex tilapia using company made pellet type floating supplementary feed is more profitable than that of homemade supplementary feed composed of rice bran (75%) and mustard oil cake (25%). The commercial fish farmers who can invest sufficient fund in fish farming can use company made pellet type floating supplementary feed which will yield more production with more net profit. But the small and poor farmers who have no ability to invest more capital in fish culture can practice mono sex tilapia farming using homemade supplementary feed composed of rice bran (75%) and mustard oil cake (25%).

Note: Three students of PGDRD course (2nd batch) Ms. Razia Khatun, Md. Alomgir Mondol and Md. Abdullah-Al-Mamun contributed a lot in conducted the field work of the experiment.

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Business Opportunity of Trichoderma Composting Technology

Suvagata Bagchi¹

Abstract

The reckless use of synthetic chemicals along with restless cropping, high-yielding varieties, drought and salinity have resulted in to an utterly spoiled soil condition. The OM status has declined to 0.5–0.9% in some places while it should be near to 5% with good water retaining capacity. Farmers apply these poisonous chemical directly on the fields without following proper caution thus attributing a serious health risk to the both producers and consumers. Apart from acute illness, various deadly chronic diseases are nesting in their bodies. On the top of that fertilized plants lure insects more which demands higher inputs of chemicals. Leachate of those flow down to the adjacent water bodies and destroy the aquatic life. The total ecosystem is getting discoursed. Trichoderma is an essential natural fungus which has a great virtue of decomposing all kinds of organic matter back to the soil. Consequently the OM status of soil escalates which means soil becomes more fertile. RDA scientists have successfully developed Trichoderma compost model. They have studied that Trichoderma compost are capable of reviving soil in field level. Besides, Tricho-compost can also minimize the need and use of the chemical fertilizer concurrently making the soil more fertile, good water retaining and enabling high crop yield. So in a capitalistic globalized world where rapid outreach of Trichoderma compost technology has no alternative but introducing it at commercial scale. By reviewing the above facts along with rural socio-economic condition, locally available technology, established organization and market, this paper has generated some idea for the extension of Trichoderma compost technology through business opportunity perspective.

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Communication and Globalization: The Problems and Prospects in Bangladesh

*Fahmida Sultana*¹

*Rayhan Miah*²

Abstract

Globalization has wide range of consequence for modern world especially for development of communication. Changes had occurred in Bangladesh economy, politics, society, social formation, culture, environment, education, family etc for Globalization. Global communication had both positive and negative impact. Objective of the study focused on the opportunities which global communication had brought for Bangladesh as well as remedial measures to solve the problems of globalization in Bangladesh. The paper was based on secondary data source which were relevant books, articles, reports, websites, journals, and documents from the concerned organizations. Findings showed being a part of global village; Bangladesh had been changing her condition by taking the positive consequence of globalization. On the other hand Bangladesh also was losing traditional views, culture, belief, and norms. It was kind of giving chances to developed countries and other international originations to set up a new colonialism within the country. Successful Global communication depended only when world population would be treat as one single brotherhood and were ready to live in a spirit of sharing and cooperation rather than in the spirit of deprivation and competition. Therefore a thorough understanding of the effect of globalization is needed to use its advantages for improving country condition.

Keywords: Globalization, Communication, International Trade, Knowledge, Environment

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Fostering Community Based Waste Management Practice for Developing Sustainable Environment

Samir Kumar Sarkar¹

Abstract

There is an increasing demand for livestock products for the growing and more affluent populations of many developing countries, particularly in Asia, which offers new market opportunities for poor farmers. Community based waste management approach is followed to reduce the major negative impact on environmental and health hazards created by improperly managed waste mainly focused on livestock production system of Bangladesh. The total waste amounted 4,78,220 kg annually managed by the community attributed to a significant role regarding livestock production and human health, sanitation, economic as well as environmental aspects. In terms of economic the Bamunia village community of Bogra district of Bangladesh could earned net benefit of Tk. 2,70,146/= last year in 2014 by selling waste by-products. Major earnings come from produced 95,644 kg of organic manure Tk. 1,37,546/= The global environmental perspective is to reduce livestock-induced pollution and environmental degradation. One of the major costs of running an agricultural farm can include buying nitrogen in the form of anhydrous ammonia to fertilize crops. But there are additional agricultural costs associated with nitrogen, especially when the nitrogen in livestock waste produces pungent and potentially harmful ammonia emissions. To get expected production and to capture optimum socio-economic benefit from livestock raising waste must be managed in proper ways through a community based biogas producing approach of waste management to have sustainable environment. During one year community could managed 4,78,220 kg of degradable mixed waste and twisted about 17,216 m³ of biogas and utilized that gas for cooking and electricity generation. The remarkable benefits come from women's saved time and money those who were involved in collecting cooking fuel before starting this project at Bamunia village under Shajanpur upazila of Bogra district situated in the northern region of Bangladesh. The 200 households at the community in one year have saved 15,881 working days through reduced time required for managing of fuel materials for cooking purposes. Most of the saved time is being used for household tasks and especially for education of the children. This can be considered as one of the greatest contributions to the nation.

Key words: Community, waste management, environment

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Methane Emissions from the Dams: Environment-friendliness of Hydropower

Dr. Mahfuzul Haque¹

Abstract

This article is an attempt to relook at the hydropower energy based on the new findings and argues that popular understanding of hydropower as environment-friendly with no emission should be questioned against the backdrop of allegations of methane emissions from the submerged reservoir. As climate change is taking place due to increased presence of greenhouse gases in the atmosphere, the scientists and climatologists are putting emphasis on promotion of renewable energy, like hydropower energy. The article questions validity of the statement and unearth the issue of methane emission both upstream and downstream of the reservoir— a fact based on recent scientific findings. The paper suggests that promotion of hydropower by Clean Development Mechanism (CDM) under Kyoto Protocol 1997 and subsequently by Intergovernmental Panel on Climate Change (IPCC) as an alternative to non-renewable energy should be immediately halted and further investigations needed to be carried out on the probable adverse impacts of hydropower energy on the environment.

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Role of Homestead Agroforestry on Livelihood Improvement of Rural Women in Dinajpur District, Bangladesh

Rebeka Sultana¹

Abstract

The study was conducted in five upazillas of Dinajpur District. Total 100 women respondents were selected randomly for the study 20 from each upazilla. The study was undertaken to determine the level of acceptability of homestead agroforestry practices by the women and its impact on their livelihood. It also explored the relationships among the selected characteristics of the women namely age, education, family size, homestead area, knowledge of homestead agroforestry, annual income from homestead area, problem confrontation with homestead agroforestry practices and opinion regarding changes of livelihood. A structured interview schedule was used to collect data and correlation test was conducted to ascertain the relationship between concerned dependent and independent variables of the study. The majority (67%) of the women had medium attitude regarding changes in livelihood while; 23% had low attitude and 10% had high attitude towards traditional homestead agroforestry practices. Education, knowledge of agroforestry, homestead area, knowledge on homestead agroforestry had significant positive relationship with their attitude regarding changes in livelihood; while age, family size, annual income from homestead area and problem confrontation had no significant relationship. Therefore, there is a great scope to improve the existing homestead agroforestry practices with suitable agroforestry approaches for maximizing income of the women.

Keywords: Homestead Agroforestry, Rural Women, Women's opinion

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Salinity Intrusion in the Coastal Areas of Bangladesh: A New Challenge to Agricultural Sustainability

Fahmida Sultana¹

Rayhan Miah²

Abstract

Salinity intrusion is an increasing problem in the coastal areas around the world. Climate Change and its associated hazards like sea level rise, cyclone and storm surge had been increasing the salinity problem in many folds. The purpose of the study was to identify how salinity intuition was putting challenge to agricultural sustainability and its possible remedy measures for coastal areas. The study was mainly qualitative and the data was collected from secondary sources. Data revealed that climatic and anthropogenic factors were mainly responsible for salinity and sea level raise. That was found as main cause for saline intuition in coastal regions and reason for increasing salinity in surface water, ground water, soil degradation and loss of agricultural production. Besides cyclone, storm surge, back water effect, precipitation also enhance also enhance salinity. Salinity causes unfavorable environment and hydrological situation and hampered crop production and livelihood improvement of farmers. Therefore, to prevent current loss and to reduce future loss this paper recommended some adaptive techniques and strategies that was protection of embankment, establishment of sluice gate, leveling of land, rain water harvesting, saline tolerant treatment, verities and adaptive measures and irrigation management system etc.

Key words: Climate change, Salinity intrusion, Sea level rise, Crop production

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Effects of Gibberellic Acid (GA₃) on Table Grape Production (*Vitis vinifera* L.)

Dr. Ranajit Chandra Adhikary¹

Abdullah Al Mamun²

Md. Asaduss Zaman³

Abstract

Gibberellic acid (GA₃), a plant growth regulator commonly used in vineyard of RDA demonstration farm to enhance berry size, early and uniform ripening and seedless bunch which was sprayed on grape (*Vitis vinifera*) cultivars 'Jakkaw' and 'Thompson'. GA₃ treatments at 10 ppm, 20 ppm, 30 ppm and 40 ppm were sprayed on the leaves and fruit clusters before and after anthesis. The first spray was at pre-blooming stage followed by a second spray two weeks later at the prebloom dip stage; third spray after berry set and finally when berry was 6–7 mm in diameter the fourth spray was applied. Effect of GA₃ on fruit and seed development were observed in those sprayed vines: 1) increased berry size and weight; 2) observed early and uniform ripening; 3) noticed the presence of seedless berries and 4) thickness of pulp of the berries. But no differences were observed between the experimental cultivars compared with the control one. The results indicated that there was no significant effect of GA₃ but there is opportunity for further experiment with higher doses.

Key words: Gibberellic acid (GA₃), Anthesis, *Vitis vinifera* L.

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Usage Pattern of Mobile Banking Services in Rural Areas: A Study at Sherpur Upazila of Bogra District

Asim Kumar Sarker¹

Abstract

Mobile Banking (M-Banking) was defined as one of the new dimensions to reach the mass people with the modern banking services by using the mobile network coverage. In the rural areas of Bangladesh where the branch banking services were unable to reach, m-banking services could fill the gap efficiently to ensure the appropriate access to finance to that people. This study was an attempt to find out the demographic status and the attitude towards the adoption of m-banking services in the rural areas of Bangladesh. Data was collected following both the qualitative and quantitative method. A total of 100 respondents were surveyed in the Sherpur Upazila of Bogra District. The study found that about nine (09) percent women were using m-banking services and they usually depend on the male members of their family. The usage practices were more in the age group of 26–35 years. In aspect of consumers' attitude on comfort level, trustworthiness and time saving towards using m-banking services were also addressed. Regarding comfort level, about 76 percent respondents feel comfort to make their transactions with the help of m-banking agents; about 100 percent respondents thought that the transaction cost was very high that of traditional banking; only 16 percent respondents have the trustworthiness on m-banking transactions and about 92 percent respondents thought that m-banking transactions make their time saved. Though this concept of m-banking was relatively new in Bangladesh but it's highly potential. So the stakeholders could adopt effective action plan to expand its operations throughout the country especially in rural areas.

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Local Environmental Exposure and Community Vulnerability to Climatic Hazards in Bangladesh

Shaikh Mehdee Mohammad¹

Abstract

Bangladesh is one of the most disaster prone countries of the world and it is predicted that its current climate variability will be made worse by future climate change. Apart from a well-known disaster management system and inherited coping mechanisms of residents in high risk locations of Bangladesh, vulnerability to environmental disasters and climate change remains high. To better understand the meaning of environmental vulnerability in local context, the present study was carried out amongst both flood and cyclone survivors in focal regions of Bangladesh using qualitative and quantitative approaches. Despite regional disparities, the respondents overall claimed that geographical location and the morphological formation of their land were the major aspects of environmental vulnerability to disasters and climate change. They were concerned about localised seasonality and natural resources due to their agriculture based livelihoods. Moreover, the study found that the char-dwellers from the Jamuna river basin were regularly displaced from river islands to the mainland due to floods and river bank erosions whereas the Cyclone Sidr survivors who lived closer to the coast were severely affected by the cyclonic event in terms of house damages. However, the respondents from the Jamuna river basin had their houses on higher plinth and had not been affected by floods or river erosions since 2005. The people who lived in the villages situated behind the 'Sunderbans' were not exposed to cyclone Sidr. The results show how initiatives such as home plinth raising, coastal afforestation, resilient settlement design and sustainable livelihoods decrease environmental vulnerability to climate induced disasters in Bangladesh.

Key words: environmental vulnerability, hazard exposure, climate change, disaster survivors, Bangladesh.

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Mass Media, the Rights of Disabled People of Bangladesh: A Critical Overview

Dr. Mustak Ahmed¹

Nusrat Jahan²

Abstract

The aim of this article is to explore how representations of disabled people rights and policies in mass media can be used to increase awareness of society members in Bangladesh. At the same, this article set some prospective research models for studying of mass media representation of disability rights and policies related issues that use different critical perspectives in order to better understand the problems of access, equal opportunity, rights, policy and employment as they affect persons with disabilities. This unfolds the inter-relationship among mass media, society and persons with disabilities. It also discussed the critical framework for studying media representations of persons with disabilities. Finally, the article discovered a participatory conceptual model for portraying rights and policies of disabled people of mass media of Bangladesh.

Key Words: Mass Media, Disability, Representation, Rights, Policy, Development.

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