

## **PITT DIFFUSION OF INFORMATION**

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**SUMBER: TEEAL**

- 1. Diffusion and adoption of non-certified organic agriculture: a case study from semi-arid Makueni District, Kenya**

**Source: Journal of Sustainable Agriculture. 2008. 32 (4). 531-564**

**Author(s): Goldberger-J-R**

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**Abstract:** This paper traces the diffusion and adoption of non-certified organic agriculture in a semi-arid region of Kenya. Non-certified organic agriculture is conceptualized as an information-intensive innovation comprising 25 distinct practices. Farmers learn about these practices from multiple sources and then choose what to adopt based on their personal preferences, farm characteristics, perceived needs, knowledge level, and other factors. Consequently, each organic agriculture practice is associated with a different adoption rate and set of perceived adoption constraints. This paper also includes discussion of the apparent disconnect between farmers' interaction with non-governmental organizations - the primary source of organic agriculture information in Kenya - and their adoption of organic agriculture practices

**Descriptors: case-studies. constraints. diffusion-of-information. information-services. innovation-adoption. non-governmental-organizations. organic-farming. semiarid-zones. technology-transfer**

- 2. Ideologically structured information exchange among environmental groups**

**Source: Rural Sociology. 2008. 73 (2). 230-249**

**Author(s): Lhotka-L. Bailey-C. Dubois-M**

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**Abstract:** We use social network analysis to test the hypothesis that group ideology affects information exchange among environmental groups. The analysis is based on interviews with leaders of 136 environmental groups in Alabama. This paper adds to the literature on resource mobilization among social movement organizations by exploring information exchange among a wide range of environmental groups across an entire state, and by incorporating ideology into our analysis. A typology of environmental groups was developed based on willingness to engage or not engage

in political and legal activism to pursue their goals. We found a level of information exchange between activist groups twice that among all other groups. We also found that differing ideological profiles did not limit the flow of information between groups, taken as a whole. We conclude that the relatively high level of connectivity is attributable in part to the presence of paid staff among several key activist groups, making these groups important resources for technical and non-technical support for all groups across the state

**Descriptors: diffusion-of-information. environmental-protection. groups. ideology. networking. Organizations**

**3. Statistical reporting in the Indian forestry sector: status, gaps and approach**

**Source: International Forestry Review. 2008. 10 (2). 331-340**

**Author(s): Kishwan-J. Sohal-H-S. Nautiyal-R. Kolli-R. Yadav-J**

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Abstract: The collection, processing and dissemination of statistics pertaining to the forestry sector in India have become a major cause of concern for policy planners and researchers. The status of estimates related to various parameters of the forestry and logging sector in the country is not up to the mark. Inordinate delay in data availability, difficulty in validation and general non-response complicate the problem. The forestry sector in general and the state forest departments in particular need to be revitalised and priority needs to be given to statistical reporting work to assist policy decisions. The sector has also lagged behind in adapting the tools of modern technology, particularly those relating to information technology. The paper examines the issue in detail, critically analysing various reasons for the gaps and discusses the methods to plug these, with a view to creating a reliable databank for the forestry sector in India

**Descriptors: data-collection. data-processing. databases. diffusion-of-information. forest-management. forest-policy. forestry. forests. Logging**

**4. Strategic approaches to informing the public about biotechnology in Latin America**

**Source: Electronic Journal of Biotechnology. 2007. 10 (2). 169-177**

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Abstract: The benefits of today's biotechnology products are not evident to consumers. The public will accept biotechnology only when individuals decide for themselves that biotec products will contribute to their personal well-being. To make such a decision, people will need greater awareness and understanding of how biotechnology will affect the environment, human health, local and national economies, and the well-being of society. A low level of awareness and understanding about biotechnology is characteristic of Latin America and the Caribbean countries, as elsewhere, efforts to remedy poor public perception often seem inadequate and do not reflect a well-designed strategy. In order to improve the understanding of the biotechnology and their human applications, a strategic plan for public communications is required. Specific objectives for this initiative may include: (1) to make evident to decision makers that modern biotechnology can be an effective tool for increasing agricultural productivity, and thereby economic growth, without imposing unacceptable risk to the environment or human and animal health; (2) to enable members of the public to make informed decisions about appropriate uses of biotechnology by providing accurate information about benefits, risks and impacts; or (3) to incorporate modern biotechnology into science curricula for secondary schools, university and college students, and agriculture extension officers. A variety of specialized expertise, including communication specialists, technical writers, graphic artists and illustrators to design information materials and conduct training is needed to implement this. Ideally, members bring expertise in biotechnology and biosafety, public communications and project management. The plan will need to identify scientists and technical experts who can provide expertise in science writing for general audiences, advertising, graphic arts, public opinion polling and media communications. These people can provide basic information about the techniques of modern biotechnology; the products now available and those being developed; what is known about the nature, probability and consequences of potential risks. Governments, industry, universities and media must play an important role to improve public perception about biotechnology, this is a requirement to develop biotechnology in the Region

**Descriptors: biotechnology. diffusion-of-information. environmental-impact. genetic-engineering. genetic-transformation. genetically-engineered-organisms. risk-assessment**

**5. Promotion of African leafy vegetables within the agricultural research council-vegetable and ornamental plant institute: the impact of the project**

**Source: African Journal of Food, Agriculture, Nutrition and Development. 2007. 7 (4). 9**

**Author(s): Sonja-V-L. Willem-J-van-R. Ineke-V-H-J. Heever-E-van-de. Zijl-J-J-B-va**

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Private Bag, X 293, Pretoria, 0001, South Africa**

**Abstract:** The importance of indigenous knowledge and traditional crops in the survival strategies of rural people have only recently been recognized by researchers in South Africa. The purpose of this paper is to illustrate the effect of the promotion of African leafy vegetables for food security and nutrition project on African vegetable research and its impact in the Agricultural Research Council (ARC) of South Africa. Indigenous crops research is since 1994 an existing research focus area for ARC-Roodeplaat. The impact of the promotion of African leafy vegetables for food security and nutrition project however was noticeable, since it strengthened existing research projects. The reason for this is that the baseline information gathered as part of this project provided a better understanding of the role these crops play in the survival strategies and food security of the rural communities in South Africa. The production training and awareness actions spilled over into larger extension groups and resulted in more communities targeted, with both gender and age differences addressed. New research has been initiated to help address some of the problems (production systems) and lack of information (baseline, consumption patterns, nutritional analysis and market value) identified. The food-based approach, Addressing low vitamin A status with the use of orange fleshed sweet potatoes and dark green leafy vegetables, is now starting to incorporate the information gathered during the study in the different communities, thus ensuring a more holistic approach. The potential commercial value of these crops was highlighted and the role it could play for establishing emerging farmers enhanced. Awareness creation within the scientific community was done through publications, papers, posters, workshop and conference attendance, with some conference organizers specifically inviting these contributions. The exposure has led to more national and international institutions making use of the capacity built during the project duration. Universities are partners on nutritional and consumption studies, thus helping to strengthen the capacity in the scientific community on traditional vegetables. All these actions help to uplift the image of African Leafy vegetables from a poor man's crop to a high value niche market crop

**Descriptors: diffusion of information; food security; indigenous knowledge; leafy vegetables; nutrition research; rural communities; sweet potatoes; training Ipomoea; Convolvulaceae; Solanales; dicotyledons; angiosperms; Spermatophyta; plants; eukaryotes; Southern Africa; Africa South of Sahara; Africa; Developing Countries; Threshold Countries; Anglophone Africa; Commonwealth of Nations**

**6. Balancing livestock with grazing capacity (BLGC): a new approach in sustainable management of rangelands in Iran**

**Source: Journal of Sustainable Agriculture. 2007. 31 (1). 61-73**

**Author(s): Hedjazi-Y**

**Author Affiliation: Faculty of Agriculture, Department of Agricultural Extension and Education, University of Tehran, Karaj, Iran**

Abstract: Rangelands cover about 54 percent of total land in Iran. In spite of their very high importance, rangelands are degrading each year. The national plan of balancing livestock with grazing capacity (BLGC) is intended to aid in rangeland preservation and promotion. There are three main activities in the plan: (1) preparation and implementation of rangeland projects, (2) exercise of management in the grazing of rangelands, and (3) conversion of low-yield rain-fed lands to fodder crop fields. Two important objectives are followed in the process: (1) decreasing the number of rangeland users and (2) preventing an excess of livestock over rangeland capacity. Diffusion of innovation theory has been employed in this study to describe how rangeland users would go about accepting the projects in the plan BLGC. The purpose of this study is to find out the role of BLGC plan attributes, individual user characteristics, and extension methods in acceptance of the plan. The collaborating population in the study comes from 15 provinces in Iran. The statistical population consisted of 119 rangeland users. Spearman Test indicated a positive and meaningful correlation between BLGC attributes, extension methods, and the rate of BLGC plan adoption. Among BLGC plan-related attributes, relative advantage exhibits the most effect as indicated by results obtained from regression analysis. From among individual characteristics, education, and from among extension methods, symbolic ceremonies as well as contact with change agents and experts have been observed to be the most influential in the rate of BLGC plan adoption

**Descriptors: change. diffusion-of-information. extension. grasslands. grazing. innovation-adoption. land-degradation. land-use. livestock-farming. range-management. rangelands. sown-grasslands. Sustainability**

**7. Climate forecast and prediction product dissemination for agriculture in the United States**

**Source: Australian Journal of Agricultural Research. 2007. 58 (10). 966-974**

**Author(s): Garbrecht-J-D. Schneider-J-M**

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Abstract: A wealth of climate forecast information and related prediction products are available, but impediments to adoption of these products by ranchers and farmers in the United States remain to be addressed. Impediments for agricultural applications

include modest forecast skill, limited climate predictability, inappropriate forecast scale for site-specific applications, difficulties in interpretation of probabilistic forecasts by farmers and integration into agricultural decision systems, uncertainty about the value and effect of forecast information in multi-variable decision system, and generally low frequency of relevant forecasts. Various research institutions have conducted case studies of climate effects on agricultural production systems, particularly effects of historical ENSO signals in the south-eastern United States. Several studies addressed risk and economic values of seasonal climate forecasts, and others bridged the gap between current forecasting software and products and agricultural applications. These studies attest to the availability and suitability of forecast and impact-prediction software, as well as derived products for agricultural applications. Yet, little attention has been given to operational and application-specific prediction products for general agricultural use, and to an effective and affordable delivery system that reaches and resonates with the agricultural end-user (a prerequisite for adoption). The two latter impediments are the focus of this paper. Two existing approaches, the top-down and the participatory end-to-end approach for development and delivery of prediction products, are reviewed. A third approach, the hybrid approach, is emphasised and uses the top-down approach for climate forecast delivery and a participatory approach for development and delivery of farm-specific prediction information for the agricultural end-user. Suitability of such prediction products for agricultural applications and constraints to successful adoption are also discussed

**Descriptors: agricultural-production. climate. decision-making. diffusion-of-information. forecasting. innovation-adoption. participation. prediction. probability-analysis. Reviews**

**8. Can information alone change behavior? Response to arsenic contamination of groundwater in Bangladesh**

**Source: Journal of Development Economics. 2007. 84 (2). 731-754**

**Author(s): Madajewicz-M. Pfaff-A. Geen-A-van. Graziano-J. Iftikhar-Hussein. Hasina-Momotaj. Sylvi-R. Ahsan-H**

**Author Affiliation: Columbia University, USA**

**Abstract:** We study how effectively information induces Bangladeshi households to avoid a health risk. The response to information is large and rapid; knowing that the household's well water has an unsafe concentration of arsenic raises the probability that the household changes to another well within one year by 0.37. Households who change wells increase the time spent obtaining water fifteen-fold. We identify a causal effect of information, since incidence of arsenic is uncorrelated with household characteristics. Our door-to-door information campaign provides well-specific arsenic levels without which behavior does not change. Media communicate general information about arsenic less expensively and no less effectively

**Descriptors: arsenic. diffusion-of-information. groundwater. groundwater-pollution. health-education. health-programs. human-behaviour. mass-media. Wells**

**9. On the determinants of mortality reductions in the developing world**

**Source: Population and Development Review. 2007. 33 (2). 247-287**

**Author(s): Soares-R-R**

**Author Affiliation: University of Maryland, Maryland, USA**

Abstract: This article presents and critically discusses evidence on the determinants of mortality reductions in developing countries. It argues that increases in life expectancy between 1960 and 2000 were largely independent of improvements in income. The author characterizes the age and cause-of-death profile of changes in mortality and assesses what can be learned about the determinants of these changes from the international evidence and from country-specific studies. Public health infrastructure, immunization, targeted programs, and the spread of less palpable forms of knowledge all seem to have been important factors. Finally, the article suggests that the evolution of health inequality across and within countries is intrinsically related to the process of diffusion of new technologies and to the nature of these new technologies, public or private

**Descriptors: age. causes-of-death. diffusion-of-information. immunization. income. life-expectancy. mortality. public-health. Vaccination**

**10. A position paper on the electronic publication of nematode taxonomic manuscripts**

**Source: Journal of Nematology. 2006. 38 (3). 305-311**

**Author(s): Eyuaem-Abebe. Baldwin-J-G. Adams-B. Hope-D. Gardner-S. Huettel-R. Mullin-P. Powers-T. Sharma-J. Ye-W-M. Thomas-W-K**

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Abstract: Several nematode species have now attained 'model organism' status, yet there remain many niches in basic biological inquiry for which nematodes would be ideal model systems of study. However, furthering the model system approach is hindered by lack of information on nematode biodiversity. The shortage of taxonomic resources to inventory and characterize biodiversity hinders research programs in invasion biology, ecosystem functioning, conservation biology, and many others. The disproportion between numbers of species to be described and numbers of available taxonomic specialists is greater for Nematoda than for any other metazoan phylum. A partial solution to the taxonomic impediment is the adoption of recent advances in electronic publishing. Electronic publishing has the potential to increase the rate at

which taxonomic papers are published, the breadth of their distribution, and the type, quantity, quality, and accessibility of data. We propose that the Journal of Nematology implement the advantageous aspects of electronic publication as a means to help ameliorate the limitations of an underdeveloped taxonomy and empower the nematological disciplines currently hindered by it

**Descriptors: biodiversity. descriptions. diffusion-of-information. Taxonomy**

**11. The role of opinion leaders in the diffusion of new knowledge: the case of integrated pest management**

**Source: World Development. 2006. 34 (7). 1287-1300**

**Author(s): Feder-G. Savastano-S**

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Abstract: This paper reviews the literature on the characteristics and impact of opinion leaders on the diffusion of new knowledge, considering that there is no clear evidence on whether opinion leaders are more effective if they have similar socioeconomic attributes with that of other farmers rather than superior to would-be followers. The multivariate analysis of the changes in integrated pest management knowledge in Indonesia among follower farmers during 1991-98, indicates that opinion leaders who are superior to followers are more effective in transmitting knowledge. However, excessive superiority of socioeconomic attributes among the farmers reduces the effectiveness of diffusion

**Descriptors: diffusion-of-information. efficiency. farmers'-attitudes. innovation-adoption. innovations. integrated-pest-management. knowledge. opinions. pest-control. plant-protection. socioeconomics. technology-transfer**

**12. Information and training needs of non-timber forest products' operators in Southern Nigeria**

**Source: Journal of Sustainable Forestry. 2005. 20 (1). 43-52**

**Author(s): Egbule-P-E. Omolola-O**

**Author Affiliation: Department of Vocational and Technical Education, Agricultural Science Unit, Delta State University, Abraka, Nigeria**

Abstract: This study examined the training needs of non-timber forest products' (NTFP) operators in Southern Nigeria. One hundred-fifty forest operators in Ondo State, Nigeria were asked to answer a structured questionnaire. Data collected was analysed using percentages, mean, Chi-square test, and Pearson Product Moment Correlation. The results revealed that majority of the forest operators in Southern



Nigeria are middle-aged women with low level of education. The need for training is high and significant ( $P < 0.05$ ), and there is a positive relationship between training/information received and the operator's productivity

**Descriptors:** diffusion-of-information. education. female-labour. information. middle-aged-adults. non-wood-forest-products. operators. training. Women

**13. Constraints in utilization of internet communication among livestock farmers**

**Source:** Indian Veterinary Journal. 2005. 82 (5). 561

**Author(s):** Sharma-G-R-K. Arya-H-P-S

**Author Affiliation:** Division of Extension Education, Indian Veterinary Research Institute, Izatnagar - 243 122 (U.P.), India

Abstract: Five mandals in Andhra Pradesh, India (Kuppam, V. Kota, Shantipuram, Ramkuppam and Gudipalli) were selected from Chittoor district, because of their participation in the chain of Community Information Centres (CICs). Proportionate random sampling method was used to constitute a sample size of 280 farmers. Data were collected through personal interviews. Livestock farmers perceived the lack of expertise in handling the computer systems as the main technical constraint (32.86%) in the use of internet communication, followed by interrupted power supply and connection of internet. Socioeconomic constraints include high cost (41.79%), distant location of CICs (38.93%) and illiteracy in internet access (38.93%). Of the several psychological constraints encountered by the respondents, domination of English language (48.93%), the need for more knowledge to operate (36.07%), complexity of information (30.36%) and information available through internet is not suitable to village conditions (25%), were cited. More orientation programmes in computer operations and initiation of websites in local languages were suggested by the livestock farmers to overcome the said constraints

**Descriptors:** animal-husbandry. diffusion-of-information. farmers. information. information-services. information-technology. internet. livestock-farming. technology-transfer

**14. Constraints and opportunities for better silvicultural practice in tropical forestry: an interdisciplinary approach**

**Source:** Forest Ecology and Management. 2005. 209 (1-2). 3-18

**Author(s):** Walters-B-B. Sabogal-C. Snook-L-K. Almeida-E-de

**Author Affiliation:** Geography Department, Mount Allison University, Sackville, NB E4L 1A7, Canada

Abstract: Barriers to successful adoption of novel silvicultural practices are rarely just technical in nature. Simply put, why do some forest users practice better silviculture

than others? Diverse perspectives in the social sciences have been brought to bear on this question, but most efforts suffer from theoretical or methodological biases which undermine their utility for answering questions of interest to forest managers and policy-makers. We argue that research on silviculture practice can better serve the needs of policy-makers if it is approached more holistically and with the intention of answering clear questions about why particular users have, or have not adopted desired practices in particular situations. To illustrate this approach, we present three case studies of research on tropical silviculture practice from each of Philippines, Brazilian Amazon and Mexico. Findings from these studies indicate that a variety of factors may influence whether or not silvicultural practices are adopted. These range from characteristics of the local environment and individual users (knowledge, motivation, etc.) to wider geographical, economic and political influences. Forest researchers and policy-makers will better identify key constraints and opportunities for the adoption of silvicultural practices in particular contexts if they approach research with clear questions and an interdisciplinary approach

**Descriptors: community-forestry. community-involvement. diffusion-of-information. forest-management. forestry-practices. forests. innovation-adoption. silviculture. social-forestry. social-participation. tropical-forests**