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### Book Review

#### *Agricultural Innovation Systems: An Investment Sourcebook*

M'Randa R. Sandlin  
University of Hawai'i at Mānoa  
Honolulu, HI

J. Thomas Wynn  
Texas A&M University  
College Station, TX

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The World Bank. (2012). *Agricultural innovation systems: An investment sourcebook*. Washington, DC: Author. 658 pages. \$49.95 (USD) or free download.

#### Overview

The World Bank assembled this reference guide to explain the contributing aspects and limitations of the Agricultural Innovation System (AIS). The guide is divided into seven modules to better address topics through detailed overviews, recommended approaches and programs, and successful activities for each. The first module stresses the importance of a collaborative effort in a successful AIS structure, specifically, national coordination and governance, building innovation networks, increasing access to marketing chains, and building innovation capabilities in farmer organizations. Module 2 delves into the role of agricultural education and training as “a creator of capacity and supplier of the human resources that populate key segments of the AIS and enable that system to function more effectively” (Maguire, 2012, p. 107).

The thematic notes discuss altering higher education policy and curriculum, focusing on education and training for technical/vocational positions, and education and training for those that manage AIS

projects. Module 3 explains and explores the role of extension services in the AIS structure and success and the importance of diverse programs that extension services should offer and the role they should take as providers of information. It further looks at agriculture as a business and identifies the need for development services for local farmers, the need for extension to aid in linking the areas of the multi-faceted AIS, and the need for extension to act as innovation catalyst in the AIS structure.

In Module 4, the author emphasizes the need for linkages between the researchers, the financiers, and the implementers when grant writing and researching in agriculture to create research that is needed and wanted at all levels. Collaboration between public and private sectors and local and regional research entities in conjunction with multiple stakeholder input can result in better designed and more integrated research projects and outcomes. Organizational changes may need to occur for this integrated type of research to occur.

The fifth module addresses the

motivation and sources of funding and partnerships in business development. The nuances of public and private investments are explored as a means of business development. Additionally, the need for constant revision in priorities, investment, and direction is discussed in the context of recommended programs and activities.

Module 6 discusses the methods to facilitate a positive environment for agricultural innovation development. These methods are discussed in the context of policy, governance, intellectual property considerations, biosafety, and technical standards throughout the system. Module 7 focuses on the evaluation component of agricultural innovation systems. This component is expanded to encompass the analysis, prioritizing, and monitoring elements within the context of assimilating both short and long term decision making information. Its goal is to examine “processes to inform decision making and manage innovation” (Odame, 2012, p. 539) at these four levels. The World Bank noted the *Sourcebook* is a living document that needs to be added to, discussed, and amended as the field makes progress.

### **Evaluation**

*The Agricultural Innovation Systems: An Investment Sourcebook* compiled by The World Bank represents a well written and structured book that is a good primer for those readers interested in the elements of Agricultural Innovation Systems (AIS). The author does a good job outlining the fundamental elements of AIS, as well as illustrating these elements through the use of case studies, activities, and graphics. To this end, the overall structure of the book is pragmatically predictable.

In each module, there are four to six thematic notes written by a variety of authors that highlight opportunities for investment that support that particular

module. The contributing authors are varied and are purported to be experts in their respective fields. Each case study is arranged in a uniform fashion according to a predetermined rubric, allowing the reader to access specific elements of each case study with relative ease. Also, this format facilitates the ability of the reader to compare and contrast the specific elements of different case studies rapidly.

While the repetitiveness of the module construction raises the level of tedium to the book, its structure lends itself to rapid reference and pragmatic use. In addition to the thematic notes, each module also consists of four to nine innovative activities that highlight the successes and failures when investments have been made in that thematic area. The activities afford the reader some predictive uses and outcomes when postulating their effectiveness in similar situations. The reviewers found these activities to be a positive contribution to the book as they emphasized the key elements of knowledge in the modules to be gleaned by the reader. Innovative activities were also found to be effective in explaining concepts, creating ideas/solutions, and highlighting the importance and opportunity in investing in these types of innovations.

In addition to the themes and activities, the graphics in the book were also found by the readers to be beneficial. The boxes and graphs presented a succinct representation of the key elements in each module. In addition to providing an organized repository for the primary elements in the module, the graphics also were predictably structured throughout which allow the reader to quickly reference the fundamental tenets of each module quickly and efficiently.

### **Recommendation**

While the physical copy of this book

may be considered expensive, it was not found to be excessively so given its detail into the specific topics and subsequent length. Also, the electronic version is available at no charge, making its acquisition reasonable to the average enthusiast. The case studies and activities contained within each module add significantly to the breadth and depth of the book, allowing the reader to evaluate impacts based on real applications. This book also meets a practical need for a sourcebook that includes both pros and cons to specific agricultural development approaches. As such, we recommend this book as a quality reference guide to any person with an interest in agricultural development projects, policy makers, and agents of agricultural innovation.

### References

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