Book Review: Dry Ports – A Global Perspective: Challenges and Developments in Serving Hinterlands
Book Author(s): Rickard Bergqvist, Gordon Wilmsmeier, and Kevin Cullinane, eds.
Review Author(s): Isaac Shafran
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**Book Review**


**Dry Ports – A Global Perspective: Challenges and Developments in Serving Hinterlands**

by Isaac Shafran

This book is a welcome addition on a timely subject that has recently received increasing attention on a worldwide basis, reflecting the importance of inland freight shipping and logistics to improve the competitiveness of businesses and countries worldwide. There is no accepted definition of the term “dry port” in the industry, so the editors use the term broadly to include various initiatives to better connect and integrate inland transportation locations to coastal ports.

The book is organized into four parts by geographic area, i.e., Europe, Africa, Asia, and the Americas. The book was edited by three European researchers: Bergqvist, Wilmsmeier, and Cullinane. The individual chapters were authored by more than 20 practitioners, consultants, and academicians from around the world. After a brief general introduction by the editors, each of the chapters presents a case study in a geographic area.

The potential scope and the geographic coverage are so broad that it is not practical to deal comprehensively with the challenges and the ongoing developments that are influencing hinterlands around the world. Instead, the editors focus on 12 case studies in a few countries in each continent, each covering specific examples of different types of analysis and/or developments related to inland transportation. The combined chapters provide an overview of some of the recent historical evolution in port hinterland development in several of the major economies around the world, as well as a few examples in smaller countries. The case studies demonstrate the complexity of the issues and the variety of approaches used around the world.

The different types of projects and services covered include intermodal terminals, rail corridors, port community systems, rail and intermodal services, logistics zones, etc. Developments are discussed in specific corridors or regions in 13 countries, four in Europe (Sweden, Netherlands, Spain and UK), four in Africa (South Africa, Tanzania, Ethiopia, and Niger), two in Asia (India and China), and three in the Americas (the United States, Brazil and Chile). Some of the case studies deal only with one specific aspect (e.g., Port Community System in Valencia, Spain), while others describe “dry port” historical developments and/or ongoing initiatives throughout the entire country (e.g., in India).

**Evolving Definition of “Dry Port”**

The book’s introduction discusses briefly the evolution of the dry port term and concept. Several definitions are presented. The editors found the first use of the term in an UNCTAD 1982 report, *Multimodal Transportation and Containerization*, which defined a dry port as an inland terminal or location used by steamship lines in their bills of lading.
Dry Ports

The important role of private initiatives that led to containerization and intermodal transportation developments, particularly in the United States, is not highlighted. Further, the many significant inland port developments in the United States (similar to what the book considers as “dry ports” in other countries) are not covered in any detail.

In the United States, the term “dry port” has not been extensively used. Instead, “inland port” has been more widely used. The “inland port” concept came up mainly for two purposes: as a way to expand a port’s hinterland in order to serve additional inland markets, or to consolidate cargo from the adjacent inland region for shipping to/from a port by rail. The Virginia Port Authority developed the Virginia Inland Port located along the Norfolk Southern line near Front Royal in the late 1980s. The VIP was designed and marketed to compete with Baltimore’s more attractive inland location to handle Mid-Atlantic bound or originated cargo.¹

Since then, as global trade expanded and the supply chains of large manufacturers as well as retailers in the United States reached farther, many railroads, ports, and other industry providers began to collaborate to develop terminals similar to VIP, with direct rail connections between seaports and “inland ports.” Columbus Rickenbacker Airport developed an inland port with rail service to East, Gulf, and West Coast ports. Huntsville, Alabama, also developed a rail facility at its airport. Other recent examples include: the Greer, SC, Inland Port and proposed inland port developments in Cordele, GA; Pt. St. Lucie and Miami, FL; Casa Grande, AZ; Joliet, IL; etc.

The two chapters describing developments in the United States only briefly mention some of these “inland ports,” which have been mostly port, airport, or private industry initiatives. Instead, these two chapters emphasize rail industry initiatives, federal programs, and institutional issues. A more complete overview of historical and planned “inland port” developments in the United States would add to the book’s global perspective on dry ports.

Dry ports are generally viewed in the book as similar to inland ports in the United States, i.e., inland rail terminals, where cargo is transferred between modes, or a location where diverse cargo handling, warehousing, and other logistics services are concentrated to serve an inland region some distance away from a seaport. Considering the diverse use of the term, the editors do not attempt to use the term consistently throughout the book. Several different definitions are used in the individual chapters and different types of facilities are discussed as “dry ports” (e.g., inland terminal, hub, inland container depot, CFS, trade corridors, etc.) reflecting initiatives and practices in different countries under different regulatory and operational systems and the extent of their available intermodal services.

The editors further conclude a “dry port” can be viewed as an approach to develop efficient facilities and services for inland distribution of cargo, regardless of local conditions, geography, or diverse regulatory and operational settings. The main objectives of dry ports are summarized as: relieving port congestion, addressing limited space at the seaports, increasing port hinterlands and their competitiveness, increasing the efficiency of cargo movements and global supply chain logistics, as well as reducing environmental impacts of heavy truck movements and rail traffic in urban areas near ports.

The Case Studies

After the Introduction (Chapter 1), each of the remaining chapters describes some type of development or service that may influence hinterlands and/or specific issues or analysis regarding inland transportation, logistics, and distribution in different regions, corridors, or countries. The chapters are not organized to cover the same topics for each of the case studies. Accordingly, there is quite a range in the level of detail and the extent to which each chapter discusses dry ports and hinterlands.

Some of the topics covered include the history, existing situation, the development, operational, and financial issues involved, and the challenges being faced in the individual region or countries.
Other chapters are mainly a broad discussion of recent developments in a large geographic area, either presenting specific project or corridor developments, or focusing on policy issues, technical aspects or financial challenges faced. Two chapters deal with research on specific topics: service quality vs. price in India and potential for logistics zones in Chile.

A brief summary of each of the chapters or case studies is available in the following link: https://www.dropbox.com/sh/d7uvrrvuujwIv4rn/kmFcVArTMF.

**General Observations**

In general, the main value of the book is its global perspective both in terms of diverse topics and geographic coverage. It should be of great interest to any reader who wants to gain knowledge about the range of approaches in use around the world to better serve hinterlands. The global coverage also highlights differences in the level of intermodal services and infrastructure in developed and emerging economies.

Some of the chapters are very well written and organized, concisely covering the intended topic in the geographic region as well as highlighting key development issues and obstacles. That includes most of the chapters that describe existing and proposed dry port developments, such as the case studies regarding dry ports in Sweden, India, and China. The two chapters describing developments in the United States are also well organized, but at times these two chapters overlap. Some of the other chapters are not as clearly focused on the subject covered in the book.

Although the book’s main value is its global geographic coverage, its approach makes for a lack of unifying theme and inconsistent treatment of the subject in each geographic market. The chosen approach makes the book more a compendium of papers on different subjects tied sometimes artificially under the broad topic of “dry ports,” which is not consistently defined. Some of the chapters actually have little to do with dry ports, and present interview or research results regarding issues associated with inland freight movements that are not specifically related to dry port development, e.g., the case study of service vs. quality for public vs. private facilities in India, the results of interviews with a rail terminal and distribution services operator in the UK, and the chapter on Brazil’s foreign trade dedicated areas. The UK and Brazil chapters only peripherally relate to dry ports. The chapter on intermodal corridors in the United States is an excellent summary of rail corridor intermodal developments, but also only peripherally refers to new terminals or “dry ports” along the corridors. The case study on the Southeast Drenthe Region in the Netherlands is basically a strategic feasibility assessment of the concept in one specific area.

In summary, the reader is provided with a good list of issues and challenges in serving changing hinterlands spread out throughout the chapters. All these topics are covered to some extent, but with few general conclusions or comparative analysis of the case studies. The conclusions and comparisons between the different approaches mainly relate to developed economies. Most of the conclusions are not applicable in developing economies where dry ports in many countries are viewed as ICDs (inland container depots) and CFSs (container freight stations). In Africa, India, Brazil, and other emerging economies, there is still much to be done to provide an adequate intermodal infrastructure and modern customs clearance systems and procedures.

The book would benefit from a more focused objective aimed at a specific audience – it is not quite a textbook, research paper compendium, summary of actual historical experience, review of actual practices, or presentation of planning or analytical approaches. It is all of that at times but often it is hard to follow how the material presented is tied to the title “Dry Ports.”

One final comment must be noted. The quality of the written and other material in the book is uneven. As previously noted, some chapters are well written as would be expected in any professional publication, with adequate maps or explanations supporting the text. However, some chapters have no maps (e.g., no maps are included in Chapters 4, 6, 8, or 13). There are also sections that have poor grammar and some difficult to understand translation, resulting in unclear or incomplete sentences.
and typos (e.g., in Chapter 8). Some incorrect terms are used (such as the use of “double stock” instead of “double stack” rail services in Chapter 10). Further, some statements can be viewed as leaving out important relevant information, particularly regarding the role of private initiatives that has been historically so important in the evolution of hinterlands.

Some example of topics not well covered are listed below (additional discussion can be found in the following link: https://www.dropbox.com/sh/d7uvrrvujwlv4rn/dlIXBfML0b/Bergqvist-clos%20obs%20insert.is.docx):

1. In the Brazil chapter, private industry role in the dedicated foreign trade areas and the implication on port capacity, operations, and efficiency.
2. In the chapter on dry port potential in the U.S., the impression is given that the railroads developed double stack services, when it was a steamship line that sponsored the initial double-stack train services.
3. In the same chapter, the important role of port authorities in developing inland rail terminals is only briefly mentioned.
4. In the chapter on intermodal freight corridor developments in the United States, adjacent rail yard projects are not covered in any detail.
5. In the same chapter, the dominance of domestic containers in the United States is noted, but there is no mention of the role of APL in marketing backhaul services in their double-stack trains and the introduction of higher cube non-standard 53 ft. containers to serve domestic shippers.

Some of these topics highlight the important role of private industry in hinterland development. Ports, carriers, and logistics providers continually seek greater efficiencies through more efficient facilities and networks that provide opportunities for faster routings and lower costs. This global competitive environment triggers opportunities for innovations in inland distribution and logistics, which are mainly private initiatives in most of the world. Further, changing trade patterns and policies heavily influence hinterlands. Practical solutions are then often dependent on the size, shape, and access to the seas of the various countries, regions, and corridors around the world as well as the actions of private shippers and transport operators, not only governmental policies or actions.

Endnotes

1. The VIP project is not mentioned in the introduction of the book in describing the history and evolving use of the term “dry ports.”

Isaac Shafran is a former corporate vice president at The Louis Berger Group, Inc., where he was in charge of the Airports and Ports Division until his retirement in 2010. He has been involved as a senior advisor on projects in the United States and throughout the world. Prior to joining Berger, he was associate administrator and director of development of the Port of Baltimore. He has worked on several policy, institutional and NCHRP freight studies. He served as chairman of the TRB Committee on Freight Transportation Planning and Logistics and as president of the TRF Washington Chapter.