





adjustable to data providers according to their situations, while all moving towards the goal of data exchange and reuse. Starting from the property that describes a resource instance, a flowchart presents decision points and gives a step-by-step solution to a given problem of metadata encoding. At the end of each flowchart there are alternative sets of metadata terms that are from selected namespaces for selection. Each chart is followed by the text-based explanations corresponding to the flowchart, with notes and steps in a table, as well as examples whenever necessary. (See an example of the decision trees for creator at: <http://aims.fao.org/lode/bd/creator>). All decision trees can be found at the Website of FAO AIMS at: <http://aims.fao.org/lode/bd>.

## 6. Presenting the recommendations

The recommendations were compiled under a title “LODE-BD Recommendations -- Report on how to select appropriate encoding strategies for producing **Linked Open Data (LOD)-enabled bibliographic data**” (<http://aims.fao.org/lode/bd>)<sup>4</sup>. The LODE-BD Recommendations aimed to address two questions: how to encode bibliographic data hosted by diverse open repositories for the purpose of exchanging data across data providers; and how to encode these data as LOD-enabled bibliographic data. A selected number of widely used metadata standards and the emerging LOD-enabled vocabularies were used based on the context of the VOA3R community. In the Recommendations version 1.1, metadata terms from the DCMES (dc) and DCMI Metadata Terms (dcterms) are the fundamentals, while metadata terms from other namespaces are supplemented when additional needs are to be satisfied, including the namespaces of bibo (*Bibliographic Ontology*), ags (FAO’s Agricultural Metadata Element set), agls (*AGLS Metadata Standard* of the Australian Government Locator Service), eprint (UKOLN *Eprints Terms*), and marcrel (*MARC List for Relators*). All metadata terms used in the LODE-BD Recommendations are presented in a crosswalk table.<sup>5</sup> The report focused on the implementation of standards for data structures (e.g., on which namespace and what properties would best fit for an encoding decision), combined with limited consideration for data contents (e.g., on what metadata properties are mandatory and which value space should consider using controlled vocabulary). It is planned that other reports in the LODE Recommendations series will address other issues, with some being closely related to LODE-BD, such as the need for encoding LOD-enabled authority data and subject vocabularies.

LODE-BD aims to be useable beyond the agriculture and VOA3R communities and plans to include more widely adopted properties from other namespaces, after finishing a study of the usage of the properties in related bibliographic datasets. The next version, LODE-BD 1.2, is under development and will be released within 2011. Meanwhile, the LODE-BD Recommendations report is open for suggestions of new components according to the needs of data providers and of the new development of the LOD community. Currently, VOA3R data providers are consulting the recommendations and preparing their implementation strategies.

This poster will present a portion of the data sheet that aligns various original elements, including the table of the metadata properties and groups, the graphic presentations of the conceptual model, the crosswalk table, and two of the flowcharts. Experiences shared in this poster should provide similar projects with useful tips in methodologies, and may promote more generalized and common LOD-enabled encoding for open bibliographic data.

### Acknowledgement:

This work is partially supported by the European Commission through the ICT PSP Grant #250525 for VOA3R (Virtual Open Access Agriculture & Aquaculture Repository: Sharing Scientific and Scholarly Research related to Agriculture, Food, and Environment). The authors also would like to thank the support and advice from Ioannis N. Athanasiadis, Nikos Manouselis, Ilias Hatzakis, Tom Baker, Gordon Dunsire, Hugo Besemer, Fernanda Peset, Xavier Agenjo, Francisca Hernández, MacKenzie Smith, Karen Coyle, Antoine Issac, the FAO AIMS Group, and the content providers of the VOA3R team.

<sup>4</sup> LODE-BD Recommendations v.1.1 Report on how to select appropriate encoding strategies for producing **Linked Open Data (LOD)-enabled bibliographic data**. (2011). Agricultural Information Management Standards (AIMS), Food and Agriculture Organization (FAO) of the United Nations. Available at: <http://aims.fao.org/lode/bd>

<sup>5</sup> <http://aims.fao.org/lode/bd/crosswalk>