

# CRC990 EForTS Data Exchange Agreement (DEA)

## Preamble

The subprojects of the German Research Foundation (DFG) Collaborative Research Centre 990: Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems in Sumatra, Indonesia (EForTS) are collecting and compiling extensive datasets. Concerning the amount of effort and time required for obtaining the research data and its scientific significance within and beyond CRC990, this data is fundamental for achieving the objectives of CRC990 and other projects working towards sustainable development. The interdisciplinary focus of CRC990 offers opportunities for collaborative research across subprojects. To take full advantage of synergies and gain a wider interdisciplinary understanding of critical issues, the sharing and collaborative use of research data is crucial. Designed as a long-term project with international visibility and cooperation, CRC990 requires careful data documentation, quality and access control, as well as long-term storage, preservation, and accessibility. Furthermore, the rights of Indonesia to its natural resources and the rights of project members concerning the results of their scientific efforts must be respected within the management of data operations. These topics are the subject of this agreement.

## Article 1 Definitions

- 1.1. "CRC990" refers to the Collaborative Research Centre 990: Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems in Sumatra, Indonesia (EForTS).
- 1.2. This agreement applies to all "CRC990 members" as defined by the Bylaws of the CRC990 and by the Joint Management Board of the CRC990. It applies to research activities carried out under the CRC990 or data generated within the CRC990.
- 1.3. "Research data" refers to any information in analogue or digital format including all information in written form, drawings, audio and visual recordings, descriptions, and software, which is produced, used, acquired, derived from data, or stored for CRC990 in the course of conducting research within the CRC990 research project by any of its members.
- 1.4. "Metadata" refers to any data describing and documenting "research data".
- 1.5. The "data creator" shall include the person or persons who were responsible for the original collection, procurement and/or compilation of the data as the result of an intellectual creation. Typically this will include PhD students and PIs but not local assistants. In case of research data resulting from joint research activities, "data creator" shall include all contributing parties.
- 1.6. "MoA" refers to the "Memorandum of Agreement between the Consortium of Bogor Agricultural University, University of Jambi and Tadulako University and University of Göttingen concerning Collaborative Research Centre 990: Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems in Sumatra, Indonesia", signed at Bogor (Indonesia), on June 20th, 2012.
- 1.7. The Data Management Board consists of representatives of the CRC990 Members. The Data Management Board Members are appointed by the Joint Management Board of the CRC990.

## **Article 2**

### **Rights of CRC990 members**

- 2.1. CRC990 members have the right to access all research data in order to carry out their own research within CRC990 and to achieve the objectives of CRC990. However, CRC990 members also have the right to expect that their intellectual input and their academic interests will be protected in regard to research data. Both rights must be in accordance with Article 3 (restrictions and conditions). Both rights must be equally respected and an appropriate balance between both should be determined within the rules of this Policy.
- 2.2. A CRC990 member must respect the rights of the other CRC990 members relating to research data in accordance to this protocol.

## **Article 3**

### **Restrictions and conditions**

- 3.1. The access, use, and transfer of any research data must be in accordance with the MoA.
- 3.2. This agreement does not affect any rights of CRC990 members under applicable copyright legislation. In so far as research data are subject to copyright by a third party, such rights must be respected.
- 3.3. Authorship shall be determined by reference to national and international best practice in the sciences and relevant standards regarding good academic practice.
- 3.4. The right of first publication of research data remains with the data creator for the first five years after collection of the research data.
- 3.5. Certain types of data have legal access restrictions, e.g., information related to threatened and endangered species or any data classified as confidential, such as personal data. If such data is held in the CRC990 Information System, all legal restrictions will be enforced. Access to and use of such data is limited to forms that do not violate applicable laws and regulations.

## **Article 4**

### **Data delivery**

- 4.1. CRC990 members are responsible for storing and backing up research data safely according to recognized standards for scientific research. For appropriate measures, the INF Project can be consulted.
- 4.2. All data sets will be stored with information about who collected them, about which version of the data is being used, and the date of the latest update.
- 4.3. In the interest of collaborative research and the objectives of CRC990, data creators are required to provide CRC990 with metadata on research data and to submit data to CRC990's Information System in due time:
  - Research data must be deposited as soon as possible, at the latest within one year after the field sample has been taken or laboratory analysis has been completed.
  - Metadata must be submitted before the beginning of data collection. The metadata shall comply with the structure provided by CRC990's Information System.
- 4.4. Changes to research data or metadata must be updated in the CRC990 Information System. A final version including research data and metadata must be deposited in parallel to submitting the dissertation in case of doctoral researchers (in other cases, a final version must be deposited upon the finalization of other research outputs or the termination of the employment contract).
- 4.5. At the end of a particular subproject, a project phase, or the entire CRC990, including in the case of early termination, CRC990 members must submit to CRC990 all research data, metadata, and relevant information for specific use at the latest at the due date of the final report for the specific project phase.
- 4.6. All time frames for data delivery come into effect as soon as this Policy is ratified and the CRC990 information system provides the functions necessary for the data delivery. The Principal Investigators of subprojects are responsible for ensuring the data delivery within the period stipulated. If there are legitimate reasons, the Principal Investigators of the subproject in which the particular data was collected can request an extension of the timeframes as described in this paragraph. Decisions concerning such extensions will be made by the Data Management Board.
- 4.7. Data creators must deliver research data and metadata in an appropriate form according to common standards and good academic practices. For appropriate forms, the INF Project can be consulted.
- 4.8. All research data and metadata will be stored at Georg-August-Universität Göttingen (UGOE). All research data and metadata will be mirrored at Lembaga Ilmu Pengetahuan Indonesia (LIPI, Indonesian Institute of Sciences). The mirroring will be on a regular basis. Additional mirror servers within the CRC990 are possible. The access to the mirrored data at the mirror server(s) will be read-only. Changes to research data, metadata and access rights can only be made at the server at UGOE. All rules and restrictions in this Agreement and the access rights set within the CRC990 Information System apply to all servers, UGOE and LIPI and to any other additional mirror server.

## **Article 5**

### **Data access**

- 5.1. The access and release of all data must be in accordance with Article 3 (restrictions and conditions).
- 5.2. Data accessed by CRC990 members should primarily be used for purposes necessary to carry out their own research in CRC990.
- 5.3. CRC990 members must prevent third parties from gaining access to the database by applying reasonable measures of protection and will not provide research data to third parties without the prior consent of the data creator.
- 5.4. The CRC990 Information System will trace all downloads of a given data set.
- 5.5. All metadata will be publicly available on the CRC990 homepage or the CRC990 Information System in accordance with Article 3 (restrictions and conditions). All metadata will be released under CC-0.
- 5.6. Each CRC990 member should in most cases have access to all research data within the CRC990 Information System via the data creator. The Principal Investigators of the data creator's subproject will be informed about the request. A request for access to research data shall be treated preferentially.
- 5.7. The data creator is responsible for determining the point of time at which their research data will be internally available (without the need of a formal request) and publicly available within the CRC990 Information System. Data creators are encouraged to make their data internally and publicly available within the CRC990 Information System earlier than the periods stipulated in Article 5.8.
- 5.8. At the latest, all research data will be automatically made internally available two years after collection of the research data and publicly available five years after collection of the research data.
- 5.9. All data will be available according to the "Recommendations for Secure Storage and Availability of Digital Primary Research Data" (Deutsche Forschungsgemeinschaft, January 2009) [http://www.dfg.de/download/pdf/foerderung/programme/lis/ua\\_inf\\_empfehlungen\\_200901\\_en.pdf](http://www.dfg.de/download/pdf/foerderung/programme/lis/ua_inf_empfehlungen_200901_en.pdf)

## **Article 6 Data Use**

- 6.1. The use of unpublished data or data not released under a license specifying the terms of use must always be based on an agreement between the data creator and the data user. The following procedure will be implemented:
- 1) The data user informs the data creator about the intended use.
  - 2) The data creator provides the data user with a written agreement in which the involvement in the use of the data is regulated. Agreements on co-authorship of publications must be in accordance with Article 3 (restrictions and conditions). The data creator informs the Principal Investigators of his or her subproject about the agreement.
  - 3) The data creator grants access to the requested data to the data user. This ensures that the exact data version used can be documented.
  - 4) Before anything is submitted for publication, the data creator and the Principal Investigators of the related subprojects must be informed.
- 6.2. All permissions given concerning the access and use of research data must be documented.
- 6.3. Publications must acknowledge what as follows: "The data were compiled within the Collaborative Research Centre 990: Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems in Sumatra, Indonesia (EFForTS) funded by the German Research Foundation (DFG).
- 6.4. The use of research data is limited to scientific and non-commercial use. For an exception of this limitation, explicit permission must be sought from the Data Management Board, which will consider the view of the data creator and of the Principal Investigators of the respective projects. All exceptions must be in accordance with the MoA and Article 3 (restrictions and conditions).
- 6.5. Use of data by third parties may be granted upon prior request from same. The Data Management Board decides on those requests, which will consider the view of the data creator and of the Principal Investigators of the respective projects. The use of this research data by authorized third parties shall be subject to a written agreement by that party, to respect rights and interests of the other parties and of CRC990 members in accordance with the MoA and Article 3 (restrictions and conditions).
- 6.6. Any dispute or difference regarding access or use of research data will be moderated by the Data Management Board. The Data Management Board will take appropriate decisions on a case-by-case basis. The Data Management Board may also adjudicate on these disputes or may refer the involved parties to appropriate authorities such as the Ombuds Committee of the Georg-August-Universität Göttingen.

## **Additional Information on this document**

### **Status**

*This document is considered as the Final Version.*

### **Objective**

*The CRC990 Data Exchange Agreement is intended to define and set rules for the following issues:*

- general handling of research data (responsibilities, security, rights)*
- rights of CRC members concerning research data (authorship, scientific objectives)*
- data transfer to the CRC990 Information System (obligations, timeframes, data quality)*
- access to and use of data (availability, timeframes, data sharing, publications)*
- general restrictions and limitations (e.g. confidential data)*

### **Process**

*This document is based on an examination of the CRC 552 STORMA Protocol for data exchange and several policies and agreements of related recent DFG funded projects dealing with data (see sources below). The results of several discussions have been taken into account, such as a meeting with the PIs in Goettingen (May) and the discussions during the Kick-Off-Workshop in Indonesia (June) and the Data Management Workshop held in Bogor (November). The regulations of the Memorandum of Agreement and the Bylaws of the CRC990 were also included.*

### **Document structure**

*The paragraphs are structured by subjects and each includes the related rights, duties, responsibilities or other regulations. After general regulations applying to all paragraphs the main processes are defined in:*

*Data delivery (4): data safety, data quality, obligations for delivery, timeframes, responsibilities*

*Data access (5): availability, timeframes, internal sharing, security*

*Data use (6): procedure for use and publication, use by third parties*

*Some of the procedures (such as data use) are described and regulated on a very detailed level. Please note that this also reflects the technical capabilities of the CRC990 Information System, in which most of the work flows will be assisted or automated and therefore will not create unnecessary work for CRC members.*

### **Sources / References**

<b>STORMA</b>	CRC 552, The Stability of Rainforest Margins in Indonesia, 2004
<b>RTG 1666</b>	Global Food, 2012
<b>FOR 816</b>	Biodiversity and Sustainable Management of a Megadiverse Mountain Ecosystem in South Ecuador, 2007
<b>BE</b>	Biodiversity Exploratories (SSP 1374), 2006
<b>NEON</b>	National Ecological Observatory Network, 2010

## **Changelog**

*major changes to previous version "DEA preliminary draft", Version 0.2, 12 November 2012*

### **General changes**

- all paragraphs are numbered

### **Article 1 Coverage and Article 2 Definitions**

- Articles 1 and 2 are merged, now as "Article 1 Definitions"
- Definition of "CRC990" added
- CRC990 members are not defined within the DEA, member list removed, CRC990 Bylaws as membership reference added
- MoA specified
- Definition of "Data Management Board" added

### **Article 3 Rights of CRC990 members**

- changed number, now as "Article 2 Rights of CRC990 members"

### **Article 7 Restrictions and conditions**

- Article moved, now as "Article 3 Restrictions and conditions"
- The right of first publication is limited to five years after collection

### **Article 4 Data Delivery**

- added paragraph 4.8 on mirroring the data at Indonesian servers

### **Article 5 Data Access**

- added paragraph 5.9 on data availability, referring to DFG "Recommendations for Secure Storage and Availability of Digital Primary Research Data"

### **Article 6 Data Use**

- added paragraph 6.2 on general documentation of given permissions for access and use of research data
- paragraph 6.5: On deciding on requests the Board will consider the view of the data creator and of the PIs of the respective projects
- added paragraph 6.6 on possible actions of the Data Management Board in case of conflicts regarding research data