

### ***Data Set Number 161: Questionnaire on indigineous soil knowledge***

Identification\_Information:

Citation:

Citation\_Information:

Originator: Keiichi Hayashi

Publication\_Date: 2005

Title: Questionnaire: Fakara, Niger 2002-2003

Geospatial\_Data\_Presentation\_Form: tabular digital data

Series\_Information:

Series\_Name: JAICAF Expert Bulletin (in Japanese)

Issue\_Identification: 25 (6): 12-26

Publication\_Information:

Publication\_Place: Japan

Publisher: JAICAF

Online\_Linkage: \\Isc-

svr01\GeoNetwork\fakaradatabase\h.keiishi\questionnaire\Questionnaire.d  
bf

Description:

Abstract:

The objective of this study was to evaluate indigenous knowledge on soil and land In field surveys on indigenous knowledge (IK), different land based classifications are found, especially when fallow systems are concerned. Soil classifications, which are normally based on texture and colour, can differ from these land based classes. The farmers in this survey identified each land based class on years of cultivation after fallow. For instance, there was ?farey-zeno?, meaning fallow land and ?sakara?, ?lali-banda?, ?kwari-kwari?, noted as lands of first year, 2nd year, and 3rd year of cultivation, respectively. ?kwari-zeno? means a field that has been cultivated for 4 or more years. The most common soil type in the study area was a sandy soil called ?labu-tjirey?, meaning redish sandy soil.

Soil analysis showed a fertility reduction with the number of years of cultivation after fallow. Total nitrogen in kwari-zeno soils was 152 mg/kg, which was 33 mg/kg lower than that of sakara soils. Therefore, soil fertility restoration in a fallow system is quite important for sustainable agricultural production. As to fertility level of fallow land, a short fallow of 2 years showed lower fertility levels than a 4 years fallow. However, these latter soils are still less fertile than sakara soils, which are ?first year fields? that have been under fallow for more than 4 years. This indicates that soil fertility can not be restored sufficiently through a short time fallow system of less then 4 years.

Purpose: To obtain quantitative information of indigenous knowledge on soil fertility and soil fertility management practice

Time\_Period\_of\_Content:

Time\_Period\_Information:

Multiple\_Dates/Times:

Single\_Date/Time:

Calendar\_Date: September 2002

Single\_Date/Time:

Calendar\_Date: February 2003

Single\_Date/Time:

Calendar\_Date: May 2003

Currentness\_Reference: ground condition

Status:

Progress: Complete

Maintenance\_and\_Update\_Frequency: None planned

Spatial\_Domain:

Bounding\_Coordinates:

West\_Bounding\_Coordinate: 2.583333

East\_Bounding\_Coordinate: 2.866667

North\_Bounding\_Coordinate: 13.583333

South\_Bounding\_Coordinate: 13.333333

Data\_Set\_G-Polygon:

Data\_Set\_G-Polygon\_Outer\_G-Ring:

G-Ring\_Point:

G-Ring\_Latitude: 13.52775

G-Ring\_Longitude: 2.66024

G-Ring\_Point:

G-Ring\_Latitude: 13.50950

G-Ring\_Longitude: 2.77607

G-Ring\_Point:

G-Ring\_Latitude: 13.50219

G-Ring\_Longitude: 2.63092

Keywords:

Theme:

Theme\_Keyword\_Thesaurus: None

Theme\_Keyword: Indigenous knowledge

Theme\_Keyword: Soil fertility management

Theme\_Keyword: classification

Place:

Place\_Keyword\_Thesaurus: None

Place\_Keyword: Sahel

Place\_Keyword: West Africa

Place\_Keyword: Niger

Place\_Keyword: Fakara

Place\_Keyword: Ko Dey

Place\_Keyword: Tchigo Tegui

Place\_Keyword: Banizoumbou

Access\_Constraints: Restricteted

Use\_Constraints: Restricteted

Point\_of\_Contact:

Contact\_Information:

Contact\_Person\_Primary:

Contact\_Person: Keiichi Hayashi

Contact\_Organization: JIRCAS

Contact\_Address:

Address\_Type: mailing and physical

City: 1-1 Ohwashi, Tsukuba

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Native\_Data\_Set\_Environment: Microsoft Excel; dBase Table; ESRI ArcCatalog 9.0.0.535

Cross\_Reference:

Citation\_Information:

Originator: Eva Schlechta, Andreas Buerkert

Publication\_Date: 2004

Title: Organic inputs and farmers? management strategies in millet fields of western Niger

Series\_Information:  
 Series\_Name: Geoderma  
 Issue\_Identification: 121 (2004) 271289  
 Publication\_Information:  
 Publisher: Elsevier

Data\_Quality\_Information:  
 Attribute\_Accuracy:  
 Attribute\_Accuracy\_Report: 348 points of 24 farms in three villages  
 Quantitative\_Attribute\_Accuracy\_Assessment:  
 Attribute\_Accuracy\_Value: number of farms and soil sample

Lineage:  
 Process\_Step:  
 Process\_Description: No process step; this is the questionnaire which was used to collect informations about Indigenous Knowledge description of sampling of Area in three indicated villages

Entity\_and\_Attribute\_Information:  
 Detailed\_Description:  
 Entity\_Type:  
 Entity\_Type\_Label: Questionnaire  
 Attribute:  
 Attribute\_Label: OID  
 Attribute\_Definition: Internal feature number.  
 Attribute\_Definition\_Source: ESRI  
 Attribute\_Domain\_Values:  
 Unrepresentable\_Domain: Sequential unique whole numbers that are automatically generated.  
 Attribute:  
 Attribute\_Label: CATEGOLIES  
 Attribute\_Definition: Categories of different information collected: Soil type; level fertility; Fallow; Land utilization  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: INFORMANT1  
 Attribute\_Definition: Person who give the answer. we have 10 Informants by questionnaire  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: NAME  
 Attribute\_Definition: Name of the concerned Informant  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: VILLAGE  
 Attribute\_Definition: Name of village of the Informant  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: AGE  
 Attribute\_Definition: Age of the Informant  
 Attribute\_Definition\_Source: Keiichi Hayashi  
 Attribute:  
 Attribute\_Label: LANDSIZE  
 Attribute\_Definition: Size of concerned Land  
 Attribute\_Definition\_Source: Keiichi Hayashi

Overview\_Description:  
 Entity\_and\_Attribute\_Overview:

This dataset is a template that was used to collecte data which are contained in the following dataset:

- Soil color of Indigenous knowledge on soil in Fakara
- Indigenous knowledge description of sampling area
- Soil fertility of Indigenous knowledge soil.

This survey form was administrated to farmers (informants) by age categorie ( 20, 30, 40, 50 and farmers who have more than 50 years )

Dataset Overview:

CATEGOLI            INFORMANT    INFORMANT2            INFORMANT3  
INFORMANT4

1. Soil types

Gangani  
Tassi Tjirey (Labu Tjirey)  
Tassi Kwarey (Labu Kwarey)  
Tassi Bi            (Labu Bi)  
Botogo Tjirey  
Botogo Kwarey (Gri)  
Botogo Bi

2. Niveau de fertilite

Farey  
Birgui Farey  
Kwaratje  
Ga Zeno  
Birgui Nougou  
Fissi Nougou  
Fagou  
Balanga  
Gah  
Bongo Jinde

3. Fallow

Farey Zeno  
Sakara  
Lali Banda  
Kwari Kwari  
Kwari Zeno  
Labu Farga  
Bossey  
Bouloungou

4. Land utilization

Farey Konou  
Farey Mafe  
Farey Kware  
Farey Djibo

Distribution\_Information:

Distributor:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: JIRCAS

Contact\_Address:

Address\_Type: mailing and physical

Address: Japan International Research Center for Agricultural Sciences (JIRCAS)

City: Ohwashi, Tsukuba, Ibaraki

Postal\_Code: 305 8686

Country: JAPAN  
Contact\_Voice\_Telephone: +81 29 838 6330  
Contact\_Facsimile\_Telephone: +81 29 838 6316  
Contact\_Electronic\_Mail\_Address: head@ml.affrc.go.jp  
Contact\_Instructions: <http://www.jircas.affrc.go.jp>  
Resource\_Description: Downloadable Data  
Distribution\_Liability: Data are restricted. Users who need the data should explore the metadata file and should contact JIRCAS via his physical or mailing address  
Standard\_Order\_Process:  
  Digital\_Form:  
    Digital\_Transfer\_Information:  
      Format\_Name: dBase  
      Format\_Version\_Number: 4  
      Transfer\_Size: 0.007  
Metadata\_Reference\_Information:  
  Metadata\_Date: 20070117  
  Metadata\_Contact:  
    Contact\_Information:  
      Contact\_Organization\_Primary:  
        Contact\_Organization: ICRISATSC  
        Contact\_Person: AMADOU M.Laouali  
      Contact\_Position: Consultant  
      Contact\_Address:  
        Address\_Type: mailing and physical address  
        Address: BP: 12404  
        City: Niamey  
        Country: Niger  
      Contact\_Voice\_Telephone: 0022720722529  
      Contact\_Electronic\_Mail\_Address: a.m.laouali@cgiar.org  
      Hours\_of\_Service: 8h00am - 16h00pm z+1  
      Contact\_Instructions: Email contact  
  Metadata\_Standard\_Name: FGDC Content Standards for Digital Geospatial Metadata  
  Metadata\_Standard\_Version: FGDC-STD-001-1998  
  Metadata\_Time\_Convention: local time  
  Metadata\_Access\_Constraints: Restricted to Metadata project Scientists  
  Metadata\_Security\_Information:  
    Metadata\_Security\_Classification: Unclassified  
  Metadata\_Extensions:  
    Online\_Linkage: <http://www.esri.com/metadata/esriprof80.html>  
    Profile\_Name: ESRI Metadata Profile