Data Set Number 163: Soil Fertility (Corg TN brayP) of Indigenous Knowledge Soil

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Identification_Information:
  Citation:
    Citation_Information:
      Originator: Keiichi Hayashi
      Publication_Date: 2005
      Title: Soil Fertility (Corg TN brayP) of Indigenous Knowledge
Soil: 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\soil fertility (corg tn
brayp) of indigenous knowledge soil\Soil Fertility (Corg TN brayP) of
Indigenous Knowledge Soil.dbf
  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
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  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: Restriceted
  Use_Constraints: Restriceted
  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
        State_or_Province: Ibaraki
        Postal_Code: 305-8686
        Country: Japan
      Contact_Voice_Telephone: +81-29-838-6355
      Contact_Voice_Telephone: +227-20-722529/ 722626
      Contact_Electronic_Mail_Address: khayash@jircas.affrc.go.jp
      Contact_Electronic_Mail_Address: k.hayashi@cgiar.org
  Native_Data_Set_Environment: Microsoft Excel; dBase ; 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:
        Sample of soil
        Collecte of data by soil horizon
        Input of data in Excel spreadsheets
Spatial_Data_Organization_Information:
  Direct_Spatial_Reference_Method: Point
  Point_and_Vector_Object_Information:
    SDTS_Terms_Description:
      SDTS_Point_and_Vector_Object_Type: Area point
Entity_and_Attribute_Information:
  Detailed_Description:
    Entity_Type:
      Entity_Type_Label: Soil Fertility (Corg TN brayP) of Indigenous
Knowledge Soil
    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: TERRITORY
      Attribute_Definition: Name of the village
      Attribute_Definition_Source: Keiichi Hayashi
    Attribute:
      Attribute_Label: X_COORD
      Attribute_Definition: Longitude
      Attribute_Definition_Source: none
    Attribute:
      Attribute_Label: Y_COORD
      Attribute_Definition: Latitude
      Attribute_Definition_Source: none
    Attribute:
      Attribute_Label: SITECODE
      Attribute_Definition: Code of the site
      Attribute_Definition_Source: Keiichi Hayashi
    Attribute:
      Attribute_Label: DEPTH(CM)
      Attribute_Definition: Depth of soil horizon (cm)
      Attribute_Definition_Source: Keiichi Hayashi
    Attribute:
```

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      Attribute_Label: CORG(%)
      Attribute_Definition: Values of organic carbone in %
      Attribute_Definition_Source: Keiichi Hayashi
    Attribute:
      Attribute_Label: NT(MG/KG)
      Attribute_Definition: values of total nitrogene (Mg/kg)
      Attribute_Definition_Source: Keiichi Hayashi
    Attribute:
      Attribute_Label: B_P1(MG/KG
      Attribute_Definition: Values Phosphorus (Mg/kg)
      Attribute_Definition_Source: Keiichi Hayashi
  Overview_Description:
    Entity_and_Attribute_Overview:
      The data set contains  the soil depth and the values of
differents elements that indicate quantitative information on soil
fertility: Organique Carbone, Total Nitrogene and Phosphorus
      Dataset Overview:
      Terr            X_COORD                Y_COORD       CODE
DEPTH(CM)   CORG(%)    NT      B/P1
      TT                           2.77607                      13.50950          GY1-25
      TT                           2.77607                      13.50950          GY1-25
      TT                           2.77607                      13.50950          GY1-25
      TT                           2.77607                      13.50950          GY1-50
      TT                           2.77607                      13.50950          GY1-50
      TT                           2.77607                      13.50950          GY1-50
      TT                           2.77607                      13.50950          GY1-75
      TT                           2.77607                      13.50950          GY1-75
      TT                           2.77607                      13.50950          GY1-75
      TT                           2.77607                      13.50950        GY13-50
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: Soil fertility (Corg TN BrayP) of Indigenous
knowledge soil
  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: 0.037
Metadata_Reference_Information:
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  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
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