Citation Information

Title	Crop suitability index (value) for high input level rain-fed sweet potato
Date	2012-05-02
Series	Suitability and Potential Yield
Collective Title	Agro-ecological suitability and productivity

Dataset Identification

Abstract   Crop suitability index (value) estimated for high input level rain-fed sweet potato. The model has been applied considering the Average climate of baseline period 1961-1990 Crop suitability index (SI) reflects suitability and distribution within grid cells by values based on SI values between 0 and 10 000 (SI index times 100). This dataset is the result of the calculation procedures of GAEZ Module V (Integration of climatic and edaphic evaluation) which executes the final step in the GAEZ crop suitability and land productivity assessment. The output data on agro-climatically attainable biomass and yield for specific land utilization types (LUTs) provided by the Module II and III are used to be integrated with the edaphic evaluation performed in Module IV. Results of Module II, III and IV are combined in Module V to provide agro-ecological suitability and potential productivity estimates...(more information on Model V results in the Supplemental Information section of this metadata).

Administrative areas
The source of the administrative areas in the GAEZ is the Global Administrative Unit Layers (GAUL). GAUL is an initiative implemented by the Food and Agriculture Organization (FAO) of the United Nations and provides authoritative global spatial information on administrative units for all countries in the world. In particular, the data set at national and sub-national level applied in GAEZ v3.0 refers to the GAUL release 2009. Country names follow the official FAO NOCS names. For use in GAEZ, GAUL vector data have been transformed respectively to rasters of 5 arc-minutes and 30 arc-second grid-cells.
The countries and territories with fewer than 10 pixels are grouped as "Rest of World". For the complete list of countries included in this category, please refers to the supplemental information of this metadata.
According to GAUL 2009/08, areas and territories where ownership is unclear, or disputed, are flagged as "GAEZ disputed areas and territories" as defined by the United Nation Cartographic Section (UNCS). They include: Aksai Chin, Arunashal Pradesh, China/India, Hala'ib triangle, Ilemi triangle, Jammu Kashmir, Kuril Islands, Liancourt Rock, Ma'tan al-Sarra, Navassa Island, Paracel Islands, Scarborough Reef, Senkaku Islands, Spratly Islands.

Summary of Parameters Applied
Water supply: rain-fed
Input level: high input level
Crop: sweet potato
Time: baseline period 1961-1990
Scenario:
CO_2 Fertilization: without co2 fertilization

Input Level conditions
Crop production has been considered with high input level conditions. Under a high level of input (advanced management assumption), the farming system is mainly market oriented. Commercial production is a management objective. Production is based on improved or high yielding varieties, is fully mechanized with low labour intensity and uses optimum applications of nutrients and chemical pest, disease and weed control.

Time period description
baseline period 1961-1990: Results of climate and agro-climatic analysis based on mean climatic data for the period 1961-1990.

Scenario description
:

| Language | English, French, Spanish |
| ISO Topic Category | Farming |
| Supplemental | The Module V executes the final step in the GAEZ crop suitability and land productivity assessment. It reads the LUT specific results of the agro-climatic evaluation for biomass and yield calculated in Module II/III for different soil classes and it uses the edaphic rating produced for each soil/slope combination in Module IV. The inventories of soil resources and terrain-slope conditions are integrated by ranking all soil types in each soil map unit with regard to occurrence in different slope classes. Considering simultaneously the slope class distribution of all grid cells belonging to a particular soil map unit results in an overall consistent distribution of soil-terrain slope combinations by individual soil association map units and 30 arc-sec grid cells, soil and slope rules are applied separately for rain-fed and irrigated conditions. A detailed description on structure and overview of GAEZ procedures in the GAEZ v.3.0 Global Agro Ecological Zones - Model Documentation at http://typo3.fao.org/fileadmin/user_upload/gaez/docs/GAEZ_Model_Documentation.pdf.

Supplemental information on Administrative areas
"Rest of World" Countries: American Samoa, Anguilla, Antarctica, Aruba, Ashmore and Cartier Islands, Azores Islands, Baker Island, Bassas da India, Bermuda, Bird Island, Bouvet Island British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Christmas Island, Clipperton Island, Cocos (Keeling) Islands, Dhekelia and Akrotiri SBA, Europa Island, Falkland Islands, Fr South and Antarctic Territories, French Guiana, French Polynesia, Gaza Strip, Gibraltar, Glorioso Island, Greenland, Guadeloupe, Guam, Guernsey, Heard Island and McDonald Island, Howland Island, Isle of Man, Jarvis Island, Jersey, Johnston Atoll, Juan de Nova Island, Kingman Reef, Madeira Islands, Martinique, Mayotte, Midway Island, Montserrat, Netherlands Antilles, New Caledonia, Norfolk Island, Northern Mariana Islands, Palmyra Atoll, Pitcairn, Puerto Rico, Réunion, S.Georgia and S.Sandwich Island, St Helena, St Pierre et Miquelon, Svalbard and Jan Mayen Island, Tromelin Island, Turks and Caicos Islands, United States Virgin Islands, Wake Island, Wallis and Futuna Islands, West Bank, Western Sahara. |

Keywords

| Theme Keywords | GAEZ, suitability and potential yield, agro-ecological suitability and productivity, crop suitability, sweet potato, world |
| Place Keywords | World |

Geographic Extent

| Bounding Box | -180, -90, 180, 90 |

Temporal Extent

| Time Period | Average climate of baseline period 1961-1990 |

Spatial Representation Information

Number of Dimensions	2
Row Size	2160
Column Size	4320
Resolution	0.083333333
Units of Measure	decimal degree
Cell Geometry	area

Coordinate System

| Reference System | EPSG:4326 - WGS84 - Geographic Coordinate System (lat/long) |

Distribution Information

On-line Resources

Interactive Map	http://data.fao.org/maps/wms? service=WMS&version=1.1.0&request=GetMap&layers=GAEZ:tiff&styles=&bbox=-180.0,-90.0,180. 4326&format=application/openlayers&sld=http://gaez.fao.org/getSLD? id=pixGAEZtiffyld256w510000110000&transparent=true&cql_filter=gaez_id='res03_crav6190h_sxh
Description	Crop suitability index (value) for high input level rain-fed sweet potato

Data Quality Information

Description	Raster Information: Raster type: C - Raster with continuous values representable by a 1-byte or 2-byte integer value Aggregation: C - Area-weighted aggregation of non-zero pixel values in target raster Scalar: 0.01 Min: 5 ; Max: 10000 Dmin: 1 ; Dmax: 10000 Map Unit: Index Display Unit: Index Table Unit: Index Statistics Unit: Index Note: Scalar multiplier is used for display and download of GAEZ rasters. When using a multiplier (other than 1.0), this value is applied to all the grid values, the minimum and maximum values specified in the .rdc file, and needs to be reflected in the description of the map units. Min: Minimum value occurring in raster. Max: Maximum value occurring in raster. When 'Calc' is specified, then a fixed range is not known and must be calculated by reading and processing all raster values. Dmin: Display minimum value. Dmax: Display maximum value. '95P' means that the display maximum is calculated from the grid as the 95 % percentile of sorted grid values. '95P0' means the same but calculated for a distribution of grid values excluding zeros.

Access and Usage

Constraints	FAO and IIASA are the sole and exclusive owners of all rights, titles and interests, including trademarks, copyrights, trade names, trade secrets and other intellectual property rights, contained in the data and software of GAEZ. The data are for non-commercial use only. No third party distribution is permitted. Acknowledgements and citation. Full acknowledgement and citation in any materials or publications derived in part or in whole from GAEZ data is required and must be cited as follows: FAO/IIASA, 2010. Global Agro-ecological Zones (GAEZ v3.0). FAO, Rome, Italy and IIASA, Laxenburg, Austria.

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Metadata Information

Metadata Creation Date	2011-10-01
Language	English
Standard	ISO 19115:2003/19139
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