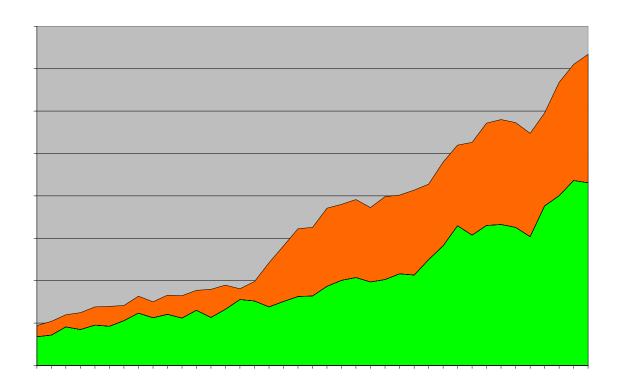




# Rice Trends in Sub-Saharan Africa



WARDA — The Africa Rice Center

#### About WARDA - The Africa Rice Center

The Africa Rice Center (WARDA) is an autonomous intergovernmental research association of African member states and also one of the 16 international agricultural research Centers supported by the Consultative Group on International Agricultural Research (CGIAR).

The mission of WARDA is to contribute to food security and poverty alleviation in sub-Saharan Africa (SSA), through research, partnerships, capacity strengthening, and policy support on rice-based systems, and in ways that promote sustainable agricultural development based on environmentally sound management of natural resources.

The *modus operandi* of WARDA is partnership at all levels. WARDA's research and development activities are conducted in collaboration with various stakeholders – primarily the National Agricultural Research Systems (NARS), academic institutions, advanced research institutions, farmers' organizations, non-governmental organizations, and donors – for the benefit of African farmers, mostly small-scale producers, as well as the millions of African families for whom rice means food.

The 'New Rice for Africa' (NERICA), which is bringing hope to millions of poor people in Africa, was developed by WARDA and its partners. The success of the NERICAs has helped shape the Center's future direction, extending its horizon beyond West and Central Africa into Eastern and Southern Africa. The creation of NERICA is in harmony with the spirit of the World Summit on Sustainable Development (WSSD), the Tokyo International Conference on Africa's Development (TICAD), the Millennium Development Goals (MDG), and the New Partnership for Africa's Development (NEPAD) for sustainable development. The African Rice Initiative (ARI) was launched in 2002 to promote the dissemination of NERICA and complementary technologies throughout SSA.

WARDA hosts ARI, the Regional Rice Research and Development Network for West and Central Africa (ROCARIZ), and the Inland Valley Consortium (IVC).

WARDA has its headquarters temporary in Benin and regional research stations near St Louis, Senegal, at the International Institute for Tropical Agriculture (IITA) in Ibadan, Nigeria, and at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) research station at Samanko, near Bamako, Mali.

For more information, visit www.warda.org

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# Rice Trends in Sub Saharan Africa

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Design: Patrick Kormawa, Ali Touré A., Frédéric Lançon

# **Contents**

Preface for the Third edition 1	
Technical notes	2

#### Preface for the third edition

WARDA set up a West Africa Rice Statistics Data Bank to serve rice policy and market development analysis. The first edition of the West Africa Rice Statistics Data Bank was published in 1996 as *Rice Trends in West Africa*. These rice trends comprise a statistical synthesis of rice production, marketing and consumption over the period 1972–1992. Since then, several major policy changes (e.g. currency devaluation, structural and post-structural adjustment) have occurred in the region and affected activities in almost all sectors, including agriculture and particularly the rice sub-sector—within which successive structural and policy changes have taken place. Thus, there is a need to update these rice trends to enable well-informed decision-making in rice policy and market development in West and Central Africa.

*Rice Trends in Sub-Saharan Africa* summarizes the major trends in rice production, consumption and trade in 52 countries of Sub-Saharan Africa. Most of these countries have adopted enhanced food-security as a common policy goal. Dramatic changes in consumption patterns during the past two decades have led to a large increase in the demand for rice from African consumers. Growth in consumption has been most substantial in Africa's rapidly growing cities, where rice is increasingly becoming the staple diet of the poorest urban households. Rice has therefore become a staple of considerable strategic importance.

In the process of updating these rice trends, the main data sources used to set up the West Africa Rice Statistics Data Bank (WARSDB) was the FAO statistical database (FAOSTAT-Agriculture Data, <a href="http://www.fao.org/">http://www.fao.org/</a>). Main indicators available in WARSDB relate to harvested area of paddy rice, yield of paddy rice, production of paddy rice, quantity of rice imports (milled equivalent), value of rice imports (milled equivalent), total rice consumption (milled equivalent), per-capita rice consumption (milled equivalent), self-reliance ratio, and rice share of calorie intake.

Trends in Africa are compared to other major rice-production regions in developing countries, and then the following pages provide an overview of the major trends by country and across the four main subregions of Sub-Saharan Africa.

Data were compiled and analyzed by Patrick Kormawa, Ali Touré A., Frédéric Lançon

#### **Technical notes**

Initial data series start from 1961 and run to 2002 or 2004, depending on the indicator. The information given by WARSDB relates to annual growth rates; yearly averages were calculated for some selected periods. For each indicator, annual growth rates and yearly averages were calculated for selected periods, namely 1961–1970, 1971–1980, 1981–1990 and 1991 to the most recent year available. An actual year value is given for comparison purposes. This information is organized in two sections. The first section gives information for the major geographical sub-regions of Sub-Saharan Africa, namely West Africa, Central Africa, East Africa, Southern Africa, North Africa, and Sub-Saharan Africa (as a whole). For comparison purposes, other world geographical regions are included in the WARSDB. In the second section, data and information on all the selected indicators are given for the individual countries for each sub-group.

Average annual growth rates were calculated for each period by the least-squares regression method. The least-squares growth rate, r, is estimated by fitting a least-squares trend regression line to the logarithmic annual value of the variable in the relevant period. The regression equation is of the form:  $\log X_t = a + b_t + e$  and represents a logarithmic transformation of the compound growth rate equation:  $X_t = X_0 (1+r)^t$ . In these equations, X is the variable of interest, t is the time (year), and t0 and t1 b = t1 log t2 are the parameters to be estimated; t3 is the error term. If t3 is the least-squares estimate of t3, then the average annual percentage growth rate, t4, is obtained as [antilog t5] - 1 and is multiplied by 100 to express it as a percentage.

Some of the FAO data series present data rounded off to the nearest thousand units (production, total consumption and imports). Users should be aware that for countries with low values for a given variable, rounding error might significantly bias growth rates and especially yield estimates. In some cases, the time-series data contain zero values due to rounding off. To permit estimation of growth rates using the logarithmic transformation, these values were arbitrarily assigned a positive value of 0.1.

Harvested area, yield and production data were downloaded from FAOSTAT-Agricultural Production—Crops Primary. Rice import data, both quantity and value, were taken from FAOSTAT-Agriculture & Food Trade-Crops & Livestock Primary & Processed. Total consumption and per-capita rice consumption data were obtained from FAOSTAT-Food Supply-Crops Primary Equivalent.

Area harvested: A land unit is counted each time it is harvested during the year. In a number of countries, rice double-cropping is practised in irrigated areas, and so area harvested in a given year may therefore exceed the total equipped irrigated area. FAOSTAT reports area harvested during the calendar year, although the user should be aware that there are often inconsistencies in how national statistics (from

which FAO statistics are usually generated) assign calendar years for growing seasons that extend into the following calendar year.

*Yield*: All figures are for paddy (also referred to as 'rough rice') harvested per hectare and are calculated as paddy production divided by area harvested for each year.

*Production*: All figures are for paddy harvested during the calendar year. The cautionary remark made regarding Area harvested also applies to production.

*Imports*: All volume figures refer to total imports of paddy, cargo rice and milled rice, measured in terms of milled-rice equivalents, and include both commercial and non-commercial (food-aid) imports. The average unit value of rice imports is calculated as the total value of commercial rice imports (US\$) divided by the total volume of commercial rice imports (metric tonnes), based on data taken from the trade section of FAOSTAT.

Consumption: Per-capita and total rice consumption refer only to rice used for human food consumption, and so do not include losses and rice (paddy) used as seed or processed for other purposes. These quantities would have to be added to rice consumed as food to obtain total disappearance. Per-capita consumption is taken from the Food supply—Crop Primary Equivalent section of FAOSTAT. All figures are for milled rice (also referred to as 'husked rice').

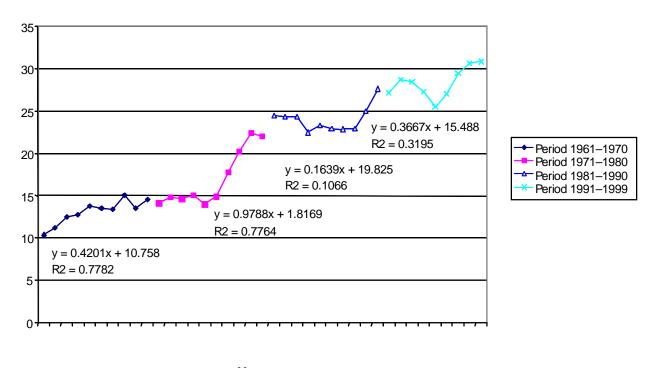
The *self-reliance ratio* is the share of locally produced rice in total rice supply. In order to avoid difficulties due to the estimation of the appropriate milling rate, this ratio was calculated by the following formula: (total consumption + exports) – imports / (total consumption).

The *rice share in calorie intake*: simply dividing the calorific intake from rice in the daily diet by the grand total calorific intake of the daily diet derives the rice share in terms of calorie intake. The importance of rice relative to other cereals in terms of calorie intake is calculated in a similar way by dividing the calorific intake from rice in the daily diet to the energetic intake from total cereals (excluding beer) contained in the daily diet.

Self-reliance ratio, and rice share in terms of calorie intake are calculated figures.

### Trends in per capita rice consumption in West Africa

Computed from FAO AGROSTAT (2001)



Years

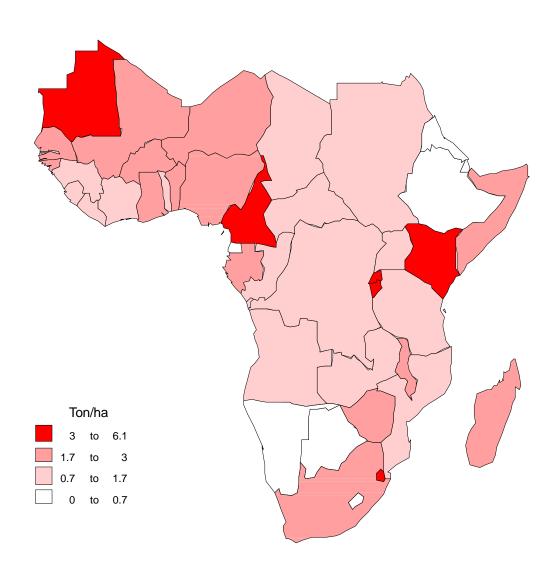
	Δι	nnual Grow	th Rate %		,	rearly Average	,		
	1961 - 1970			1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
RICE, PADDY, AREA HARVESTE									Value 2004
WEST AFRICA	2.05	2.66	2.97	3.09	1,770,059	2,261,592	2,914,271	4,152,248	6,069,192
CENTRAL AFRICA	14.04	1.71	5.66	-0.97	148,926	291,551	405,289	559,647	464,500
EAST AFRICA	3.14	2.90	0.67	1.43	1,055,818	1,390,590	1,542,777	1,716,739	1,705,500
SOUTHERN AFRICA	2.40	0.89	1.06	6.12	95,947	103,866	119,666	167,607	210,700
SUB-SAHARAN AFRICA	3.01	2.62	2.43	2.38	3,070,800	4,047,729	4,981,912	6,594,982	8,459,382
WA wo Nigeria	1.60	2.25	-0.11	2.92	1,563,459	1,951,192	2,064,671	2,313,428	2,365,192
NOTHERN AFRICA	6.73	-1.01	-0.11	3.03	411,123	449,015	413,231	582,748	637,500
CHINA	1.91	-0.38	-0.21	-0.36	30,153,303	35,744,637	33,245,127	31,550,170	28,327,000
INDIA	0.76	0.91	0.60	0.70	36,205,674	38,893,616	40,907,272	43,325,150	42,300,000
OTHER DEVELOPING ASIA			0.54						
	1.32 3.78	1.27 3.31	-1.31	1.31	45,209,233	48,794,377	53,012,373	57,146,515	61,200,162
LATIN AMERICA & CARIBBEAN				-1.00	5,629,928	7,243,164	7,587,855	6,458,345	6,450,929
OTHER COUNTRIES	0.80	1.69	-0.86	-1.22	4,623,900	4,669,823	4,488,394	4,303,076	3,919,151
WORLD	1.45	0.90	0.29	0.67	125,303,962	139,845,331	144,635,459	149,977,213	151,295,524
RICE, PADDY, YIELD (t/ha)									Value 2004
WEST AFRICA	3.07	1.07	2.71	-0.18	1.07	1.21	1.46	1.64	1.33
	-0.20	0.93	0.06	-0.16	0.80	0.80	0.88	0.81	0.99
CENTRAL AFRICA	-0.20		3.15		1.74				
EAST AFRICA		-1.20		-0.62			1.81	1.93	2.32
SOUTHERN AFRICA	-2.41	-7.62	0.73	9.07	1.33	1.12	0.90	0.88	1.11
SUB-SAHARAN AFRICA	1.10	-0.07	2.51	-0.15	1.29	1.36	1.51	1.63	1.50
WA wo Nigeria	2.92	0.26	2.58	1.74	1.04	1.13	1.22	1.59	0.00
NOTHERN AFRICA	-0.37	0.86	2.33	1.86	5.17	5.35	5.96	8.11	0.00
CHINA	4.74	2.87	2.17	1.37	2.89	3.66	5.21	6.06	6.26
INDIA	1.14	1.64	3.59	1.43	1.51	1.77	2.26	2.82	3.05
OTHER DEVELOPING ASIA	1.56	1.87	1.73	0.85	1.83	2.18	2.80	3.22	3.73
LATIN AMERICA & CARIBBEAN	-0.20	1.02	2.87	3.43	1.73	1.86	2.30	3.11	4.00
OTHER COUNTRIES	1.46	-0.32	1.10	1.54	5.01	5.29	5.62	5.92	6.69
WORLD	2.40	1.78	2.11	1.04	2.11	2.52	3.23	3.72	4.00
DICE DADDY BRODUCTION (C)									V-I 2004
RICE, PADDY, PRODUCTION (t)		0.70	E 75	0.00	4 000 740	0.705.444	4 005 070	0.040.000	Value 2004
WEST AFRICA	5.19	3.76	5.75	2.90	1,900,746	2,735,414	4,285,379	6,810,660	8,057,075
CENTRAL AFRICA	13.81	2.65	5.73	-1.32	119,337	234,629	357,244	454,811	458,053
EAST AFRICA	2.80	1.66	3.84	0.80	1,836,262	2,408,527	2,803,117	3,308,911	3,949,470
SOUTHERN AFRICA	-0.07	-6.80	1.80	15.74	126,857	115,660	108,219	152,937	232,970
SUB-SAHARAN AFRICA	4.14	2.55	5.00	2.22	3,983,386	5,494,771	7,553,793	10,724,421	12,713,948
WA wo Nigeria	4.57	2.52	2.47	4.72	1,636,646	2,202,214	2,527,247	3,698,960	4,515,075
NOTHERN AFRICA	6.33	-0.15	2.11	4.95	2,127,811	2,399,280	2,465,286	4,749,052	6,167,200
CHINA	6.75	2.48	1.86	1.00	87,843,084	130,542,650	173,276,308	191,013,543	177,434,000
INDIA	1.91	2.56	4.21	2.15	54,936,203	68,900,266	92,838,813	122,378,590	129,000,000
OTHER DEVELOPING ASIA	2.90	3.16	2.28	2.18	82,772,893	106,798,824	148,708,773	183,989,516	228,383,431
LATIN AMERICA & CARIBBEAN	3.57	4.37	1.53	2.40	9,742,811	13,487,641	17,362,414	20,044,752	25,819,435
OTHER COUNTRIES	2.27	1.37	0.23	0.31	23,179,609	24,707,584	25,198,819	25,463,654	26,237,316
WORLD	3.88	2.69	2.40	1.72	264,585,798	352,334,015	467,400,944	558,393,584	605,758,530
RICE, IMPORTS Volume (t)									Value 2003
WEST AFRICA	4.51	16.01	0.67	1.08	375,637	851,070	1,871,990	2,468,998	3,729,891
CENTRAL AFRICA	-4.89	2.87	11.35	-2.25	28,111	42,535	89,060	129,977	148,420
EAST AFRICA	3.42	9.44	-8.43	4.37	67,378	172,116	358,840	293,765	737,616
SOUTHERN AFRICA	6.85	15.95	4.87	5.19	74,337	170,372	367,067	543,248	1,029,888
SUB-SAHARAN AFRICA	3.52	13.07	-0.17	1.33	678,111	1,397,357	2,884,762	3,166,909	5,039,303
WA wo Nigeria	4.53	9.01	4.00	-1.52	374,450	645,163	1,481,501	1,997,745	2,968,012
NOTHERN AFRICA	15.94	8.90	-1.83	5.44	2,403		37,788	39,285	42,997
CHINA	-22.22	195.94	18.61	-4.41	59,286	73,217	374,065	748,013	404,659
INDIA	-1.26	-43.84	9.36	-22.23	799,185		211,957	31,956	339
OTHER DEVELOPING ASIA	2.30	1.37	-3.64	15.22	4,150,482		4,694,012	6,111,740	10,462,444
LATIN AMERICA & CARIBBEAN	0.65	9.24	5.78	-4.96	391,219	604,685	923,063	1,770,750	3,319,547
OTHER COUNTRIES				3.00	165,493		637,213	1,857,781	5,124,037
WORLD	1.54	5.04	0.84	6.39	6,243,412		9,699,487	14,264,674	25,310,670
		0.04	5.54	0.00	-,,	. ,5,5.10	- 1-00 1.01	, ,	

		Annual Grow	h Dato		,	early Average			
		1971 - 1980 1		1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
RICE, IMPORTS Valeur ('000 U	IS \$)								Value 2003
WEST AFRICA	5.78	31.78	-4.19	1.34	52,595	287,315	562,557	695,016	825,59
CENTRAL AFRICA	-0.85	13.11	11.91	-7.03	4,251	13,082	31,387	44,412	51,52
EAST AFRICA	5.67		-8.46		12.049	59.206	115,925	98,547	144,72
SOUTHERN AFRICA	11.18		0.83	3.83	12,576	58,531	114,423	162,888	207,24
SUB-SAHARAN AFRICA	5.80		-3.92	1.13	98,117	462,909	877,659	922,464	1,127,49
WA wo Nigeria	5.84		1.74	-2.04	52,346	178,705	406,363	543,776	665,38
	3.04	22.45	-2.04	6.04	230				
NOTHERN AFRICA						4,405	10,171	14,946	13,08
CHINA	-18.08		20.41	-0.79	7,897	29,640	88,839	298,962	146,07
NDIA	2.71		10.20	-20.61	122,118	49,341	53,838	6,756	5
OTHER DEVELOPING ASIA	6.96		-5.89	13.13	580,407	1,640,958	1,703,532	2,144,738	2,939,49
ATIN AMERICA & CARIBBEAN	3.34	20.61	0.74	-2.46	65,247	224,400	325,495	639,135	891,23
OTHER COUNTRIES				2.92	22,340	193,216	408,791	1,022,443	2,239,21
WORLD	5.69	17.16	-1.51	5.74	896,370	2,608,925	3,455,595	5,217,109	7,557,00
NOT 8 BEOD ### LED FO \ TO	TAL CONCL	IMPTION (4)							
RICE & PROD (MILLED EQ.), TO				0.04	4 0 40 000	0.004.000	4.50.047	0.044.000	Value 2002
WEST AFRICA	6.00		3.34		1,340,202	2,261,066	4,156,247	6,244,283	7,874,16
CENTRAL AFRICA	8.78	2.67	7.34	-1.15	97,089	179,588	295,069	391,504	422,50
EAST AFRICA	2.80	3.14	2.16	3.58	881,074	1,326,723	1,864,177	2,074,661	2,583,11
SOUTHERN AFRICA	3.06	8.89	5.15	4.74	140,502	233,356	426,810	690,842	853,45
SUB-SAHARAN AFRICA	4.54		3.50	3.51	2,428,911	3,897,201	6,555,556	9,091,971	11,388,23
WA wo Nigeria	5.47		3.03		1,201,850	1,792,653	2,831,331	3,983,504	4,930,15
NOTHERN AFRICA	3.36		2.54	4.18	862,645	1,174,896	1,459,596	2,479,995	2,780,11
CHINA	6.81		1.66	0.49	50,659,218	75,806,619	101,798,875	113,278,113	107,788,16
NDIA	0.94		3.52	1.55	33,717,639	41,063,542	55,392,129	73,067,724	87,486,28
OTHER DEVELOPING ASIA	3.27	2.52	2.46	1.99	47,491,687	64,334,541	84,683,068	103,817,363	117,540,73
ATIN AMERICA & CARIBBEAN	3.45	3.64	2.38	2.16	5,446,384	7,535,330	10,287,238	12,167,454	13,298,12
OTHER COUNTRIES	-0.33		0.01		12,825,943	12,961,657	13,466,673	13,301,577	14,675,34
WORLD	3.53		2.28			207,037,903	274,032,276	327,836,969	355,653,07
RICE & PROD (MILLED EQ.), PEI					40.07	40.00	04.04	00.40	Value 2002
WEST AFRICA	3.39		0.63		13.07	16.99	24.01	28.49	30.0
CENTRAL AFRICA	5.96	-0.13	4.01	-3.81	3.46	4.97	5.98	6.07	5.1
EAST AFRICA	-0.10	-0.10	-0.77	0.90	15.31	17.13	17.64	15.08	15.6
SOUTHERN AFRICA	0.54	6.00	2.96	2.15	3.31	4.20	6.03	7.92	8.4
SUB-SAHARAN AFRICA	1.86	3.57	0.32	0.77	10.80	13.23	16.77	16.95	17.9
WA wo Nigeria	2.97		0.03		22.72	26.35	31.72	33.65	34.9
NOTHERN AFRICA	0.82		0.00	2.15	14.93	16.00	15.44	21.01	21.0
	4.24		0.00		67.65	81.30	94.11	92.05	82.8
CHINA									
NDIA	-1.33		1.35		67.33	65.47	71.15	77.73	83.4
OTHER DEVELOPING ASIA	0.67		0.14			91.90	95.34	95.66	96.6
LATIN AMERICA & CARIBBEAN	0.75	1.20	0.40	0.50	21.68	23.33	25.66	25.42	25.1
OTHER COUNTRIES	-1.34	-0.39	-0.59	1.70	12.62	11.68	11.36	10.64	11.3
WORLD	1.45	0.62	0.54	0.09	45.35	50.35	56.05	57.51	57.3
SELE BELIANCE BATIO 9/									
SELF-RELIANCE RATIO, %	0.56	-4.10	2.04	1.60	71.80	64.85	54.55	60.11	Value 2002 39.1
WEST AFRICA									
CENTRAL AFRICA	4.68		-1.42		68.39	76.67	70.46	67.08	41.3
EAST AFRICA	-0.03		2.57	-0.20	92.36	87.20	80.62	85.90	84.9
SOUTHERN AFRICA	-3.86	-14.29	-0.67	-1.47	47.48	30.46	13.91	21.48	-10.6
SUB-SAHARAN AFRICA	0.37	-3.49	2.64	1.11	71.99	65.61	55.54	64.95	49.0
VA wo Nigeria	0.41		-0.98		68.77	65.06	47.79	49.03	28.1
NOTHERN AFRICA	-0.03		0.00		99.73	98.98	97.36	98.41	96.3
CHINA	0.03		-0.06			99.91	99.64	99.34	99.6
NDIA	0.04		-0.04		97.60	99.48	99.62	99.95	100.0
OTHER DEVELOPING ASIA	0.09		0.38		91.25	91.84	94.38	94.21	89.9
ATIN AMERICA & CARIBBEAN	0.21		-0.31	0.89	92.78	92.16	91.05	85.29	80.5
OTHER COUNTRIES	0.13		-0.85			97.63	95.27	85.92	65.2
WORLD	0.08	-0.10	0.05	-0.21	95.91	96.23	96.45	95.67	92.5
Rice Share in Terms of Cal Intake, %									Value 2002
WEST AFRICA	2.97		-0.74			9.37	12.66	11.96	12.2
CENTRAL AFRICA	4.79	3.20	4.74	-2.60	1.85	2.66	3.57	3.84	4.0
EAST AFRICA	-0.48		-0.33		5.37	5.91	5.98	5.54	5.7
SOUTHERN AFRICA		52.95	9.70		0.02	0.30	0.93	2.28	2.5
SUB-SAHARAN AFRICA	1.60		0.20		5.12	6.28	7.80	7.76	8.0
VA wo Nigeria	0.00		0.00		0.00	0.00	0.00	0.00	0.0
NOTHERN AFRICA	0.00		0.00		0.00	0.00	0.00	0.00	0.0
CHINA	2.00	-0.57	-0.92	-2.06	36.03	38.48	36.61	32.67	28.2
NDIA	-1.01		0.37	-0.99	33.12	32.08	31.98	31.84	33.6
OTHER DEVELOPING ASIA	0.00		0.00		0.00	0.00	0.00	0.00	0.0
ATIN AMERICA & CARIBBEAN	-0.08		0.42			9.17	9.57	9.19	8.8
OTHER COUNTRIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
WORLD	0.77	0.04	-0.06	-0.56	19.42	20.59	21.30	20.95	20.4

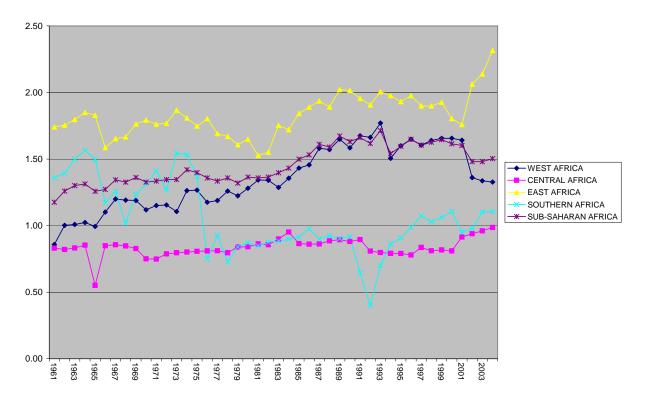
		Annual Growt	th Rate. %			Yearly Average			
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE, PADDY, AREA							1001		Value 2004
BENIN	4.51	10.60	-0.73	12.26	2,323	7,058	7,036	12,108	33,000
BURKINA FASO	-2.60	-0.84	-4.02	11.41	41,807	38,177	24,166	38.338	51,000
CAMEROON	7.01	4.48	-8.70	-1.70	12,958	22,100	17,664	16,250	20,000
CHAD	5.77	-3.57	-2.76	7.81	28,765	44,744	31,388	67,029	80,000
COTE DIVOIRE	3.13	5.08	6.33	3.30	267,930	360,400	458,800	675,431	500,000
GAMBIA	0.80	-2.11	-4.54	4.89	25,766	22,133	17,152	14,173	16,000
GHANA	7.52	7.74	-3.04	6.59	38,929	87,500	67,450	104,105	119,392
GUINEA	5.69	0.74	-5.63	4.13	320,900	449,259	459,758	440,695	525,000
GUINEABISSAU	-10.57	8.54	-9.81	1.29	50,100	54,200	78,153	66,684	65,000
LIBERIA	-5.94	2.06	0.52	7.65	186,900	190,400	227,238	111,360	120,000
MALI	-0.76	-1.49	4.17	4.59	167,520	178,508	181,847	301,753	451,000
MAURITANIA	12.84	9.22	20.31	7.18	475	1,689	8,046	19,108	17,000
NIGER	7.60	3.50	2.20	2.39	11,359	19,380	22,599	28,700	27,800
NIGERIA	5.51	4.39	10.42	3.30	206,600	310,400	849,600	1,838,820	3,704,000
SENEGAL	2.85	0.92	1.94	1.00	82,604	75,384	71,612	75,629	95,000
SIERRA LEONE	2.80	2.18	0.28	-5.95	300,087	385,000	370,960	302,857	210,000
TOGO	3.93		-1.42	10.56	25,037	15,261	20,801	39,210	35,000
WEST AFRICA	2.05	2.66	2.97	3.09	1,770,059	2,261,592	2,914,271	4,152,248	6,069,192
CENTRAL AFRICA, RICE, PADDY, A	_								Value 2004
BURUNDI	14.50	5.03	15.83	4.44	1,527	3,260	7,534	14,670	19,500
CENT AFR REP	16.04	2.32	-7.01	13.96	7,770	13,276	9,649	9,364	14,500
CONGO, DEM R	14.70	1.73	5.86	-1.36	135,218	269,500	383,025	530,956	415,000
CONGO, REP	-8.15	-4.57	-8.38	-19.46	3,915	4,133	1,703	865	2,000
GABON	-4.33	-0.51	-3.29	0.00	339	353	314	400	500
RWANDA		9.31	12.34	3.92	158	1,029	3,063	3,393	13,000
CENTRAL AFRICA	14.04	1.71	5.66	-0.97	148,926	291,551	405,289	559,647	464,500
EAST AFRICA, RICE, PADDY, AREA	HARVESTER (b.s.)								Value 2004
COMOROS	1.49	3.38	0.95	0.20	9,510	10,110	12,620	13,950	14,000
KENYA	-3.53	2.58	3.84	7.81	4,523	7,158	13,072	14,899	11,000
	2.62	1.99	-0.56	-0.01		1,094,412	1,162,362		1,222,700
MADAGASCAR					914,461			1,167,680	
MALAVM	12.58	2.49	2.01	6.81 -15.40	11,311	42,000	22,760	36,663	30,000
SOMALIA	47.45	39.41	6.69		35	3,079	3,990	1,740	
SUDAN	17.45	11.11	-25.31	17.54	1,897	8,118	3,012	2,426	4,800
TANZANIA	6.21	8.01	4.77	4.73	109,100	207,882	305,162	421,781	330,000
UGANDA EAST AFRICA	20.67 <b>3.14</b>	-2.73 <b>2.90</b>	10.21 <b>0.67</b>	4.41 <b>1.43</b>	4,981 <b>1,055,818</b>	17,831 <b>1,390,590</b>	19,800 <b>1,542,777</b>	57,600 <b>1,716,739</b>	93,000 <b>1,705,500</b>
End Filder	3.14	2.50	0.01	1140	1,055,010	1,550,550	1,542,111	1,1 10,1 30	1,1 03,300
SOUTHERN AFRICA, RICE, PADDY, A	AREA HARVESTED	(ha)							Value 2004
ANGOLA	-0.55	-5.53	-14.05	22.52	21,320	17,700	6,600	16,900	20,000
MOZAMBIQUE	3.06	2.01	1.68	5.63	68,714	79,900	102,016	136,824	179,000
SOUTH AFRICA	-1.72	0.00	0.00	0.00	1,350	1,300	1,300	1,300	1,400
SWAZILAND	1.75	1.43	-6.60	-34.37	2,342	1,758	486	158	50
ZAMBIA		24.46	7.93	1.18	261	2,165	8,977	12,228	10,000
ZIMBABWE	10.25	-15.63	-11.55	0.45	1,960	1,043	288	198	250
SOUTHERN AFRICA	2.40	0.89	1.06	6.12	95,947	103,866	119,666	167,607	210,700
									V-1 2004
SUB-SAHARAN AFRICA, RICE, PADI			0.10	0.00	0.070.000	1 0 13 300	1 004 040	0.501.000	Value 2004
SUB-SAHARAN AFRICA	3.01	2.62	2.43	2.38	3,070,800	4,047,729	4,981,912	6,594,982	8,459,382
WORLD, RICE, PADDY, AREA HARV	⊥ ESTED (ba)								Value 2004
WORLD	1.45	0.90	0.29	0.67	125,303,962	139,845,331	144,635,459	149,977,213	151,295,524
					, ,	, ,	,	, ,	,,

		Annual Grov	wth Rate			Yearly Average			
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE, PADDY, YIELD	(t/ha)								Value 2004
BENIN	14.62	-3.56	4.39	6.46	0.68	1.54	1.19	1.74	2.12
BURKINA FASO	5.21	3.74	2.96	-1.03	0.86	1.02	1.72	1.97	1.87
CAMEROON	3.97	17.77	7.40	-0.15	0.98		4.23	4.16	3.10
CHAD	-0.75	-1.81	24.35	-0.63	1.14		1.39	1.53	1.36
COTE DIVOIRE	4.24	-0.82	0.04	2.96	1.00	1.21	1.16	1.47	2.30
GAMBIA	1.21	1.63	-0.77	0.79	1.30		1.63	1.49	1.38
GHANA	0.77	-1.93	8.41	-1.57	1.11	0.91	1.11	1.78	2.03
GUINEA	-1.02	-0.07	2.48	1.42	0.97	0.90	0.87	1.44	1.71
GUINEABISSAU	6.59	-3.85	14.38	-0.83	0.96		1.53	1.91	1.95
LIBERIA	11.57	0.09	-2.31	4.15	0.83	1.23	1.23	1.15	0.92
MALI	-1.02	4.40	5.78	3.79	1.00	1.03	1.19	1.13	1.94
	-7.74	9.04	-2.91	3.79	1.50		4.53	3.70	4.53
MAURITANIA									
NIGER	12.26	-5.43	5.17	-3.21	1.83	1.62	2.52	2.35	2.75
NIGERIA	3.58	2.77	0.07	-2.33	1.26	1.69	2.08	1.70	0.96
SENEGAL	-0.74	1.77	2.42	0.92	1.27	1.19	1.98	2.36	2.78
SIERRA LEONE	3.46	-0.37	-0.10	-1.64	1.32		1.33	1.26	1.26
TOGO	-6.42	-1.96	11.09	3.64	0.81	1.08	0.99	1.50	1.95
WEST AFRICA	3.07	1.07	2.71	-0.18	1.07	1.21	1.46	1.64	1.33
CENTRAL AERICA DICE DARRY VI	ELD (Atha)								Value 2004
CENTRAL AFRICA, RICE, PADDY, YI	-9.04	3.64	4.23	0.34	2.18	2.05	3.01	2.02	
BURUNDI								3.03	3.31
CENT AFR REP	-1.72	6.88	3.29	0.75	0.88		1.38	1.42	2.05
CONGO, DEM R	-0.20	0.57	-0.45	-1.05	0.76		0.82	0.72	0.76
CONGO, REP	16.10	-4.13	-1.66	-2.06	1.44	1.08	0.82	0.97	0.75
GABON	-2.08	1.82	-1.79	-0.06	1.99	1.77	2.18	2.00	2.00
RWANDA		1.85	-7.29	-8.43	0.85	2.67	2.49	3.17	3.55
CENTRAL AFRICA	-0.20	0.93	0.06	-0.35	0.80	0.80	0.88	0.81	0.99
EAST AFRICA, RICE, PADDY, YIELD	(t/ha)								Value 2004
COMOROS	0.04	2.00	0.42	0.26	1.13	1.13	1.06	1.21	1.21
KENYA	11.10	0.34	-2.40	-8.70	4.19		3.35	3.70	4.55
MADAGASCAR	0.19	-1.03	2.46	-0.02	1.83		1.88	2.10	2.48
MALAWI	2.54	0.53	0.26	2.54	0.88	1.48	1.56	1.70	1.66
SOMALIA	2.54	-4.36	-2.34	-11.17	0.29		3.33	1.86	3.28
SUDAN	-4.77	-4.61	3.61	-8.18	0.23	1.02	1.00	0.79	3.28
	-5.11	-4.81	9.26	-1.35	1.13		1.59	1.53	1.96
TANZANIA									
UGANDA EAST AFRICA	-6.79 <b>-0.34</b>	5.58 - <b>1.20</b>	1.13 <b>3.15</b>	0.32 <b>-0.62</b>	1.14 <b>1.74</b>	1.06 <b>1.74</b>	1.28 <b>1.81</b>	1.39 <b>1.93</b>	1.51 <b>2.32</b>
LIIOT HI IGON	0.01	-1120	0.10	-0.02			1101	1100	LIGE
SOUTHERN AFRICA, RICE, PADDY, Y									Value 2004
ANGOLA	-1.93	-2.91	-3.21	-1.84	1.21	1.08	0.81	0.88	0.80
MOZAMBIQUE	-3.19	-9.21	0.77	12.68	1.32		0.86	0.85	1.12
SOUTH AFRICA	0.47	2.24	0.00	-0.33	1.51	2.23	2.31	2.29	2.29
SWAZILAND	2.29	-2.84	12.36	0.36	2.67	2.90	6.29	6.08	3.40
ZAMBIA		-0.98	2.34	0.02	0.12		0.97	0.97	1.20
ZIMBABWE	6.00	-6.49	28.79	-2.15	1.35		1.75	2.15	2.40
SOUTHERN AFRICA	-2.41	-7.62	0.73	9.07	1.33	1.12	0.90	0.88	1.11
SUB-SAHARAN AFRICA, RICE, PADI		_	_			_			Value 2004
SUB-SAHARAN AFRICA	1.10	-0.07	2.51	-0.15	1.29	1.36	1.51	1.63	1.50
WORLD, RICE, PADDY, YIELD (t/ha)									Value 200'
WORLD WORLD	2.40	1.78	2.11	1.04	2.11	2.52	3.23	3.72	4.00
TTVINLD	2.40	1.70	۷،۱۱	1.04	2.11	2.32	JiZJ	JirZ	4.00

**Rice Yield** Average Value (1991–1999)

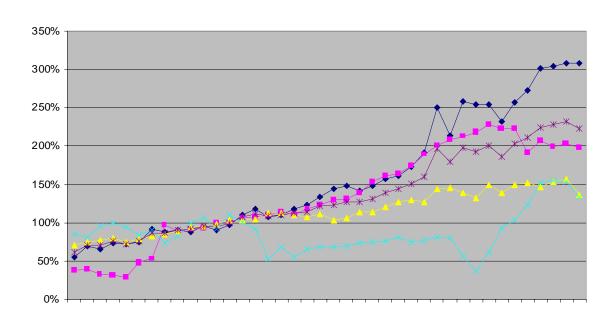


### Trends in Rice Yield

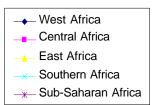


### **Production Index**

Average 1970–1975 = 100

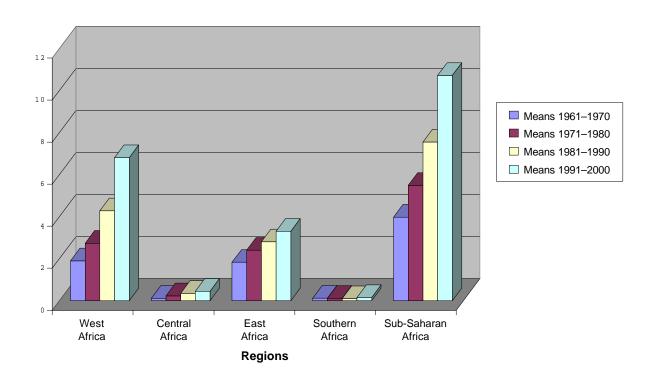


### Years

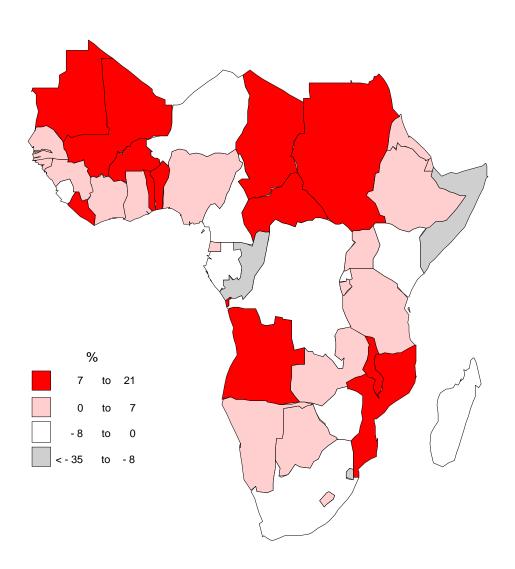


### Rice Production in Sub-Saharan Africa

Average Values

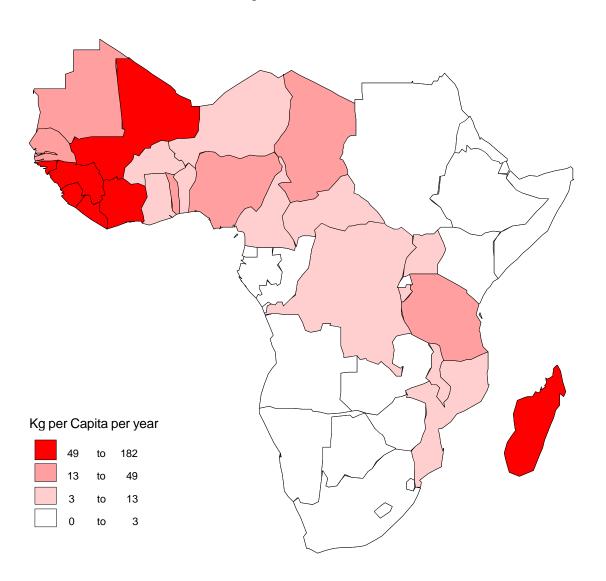


# Rice Production Annual Growth Rate 1991–2000



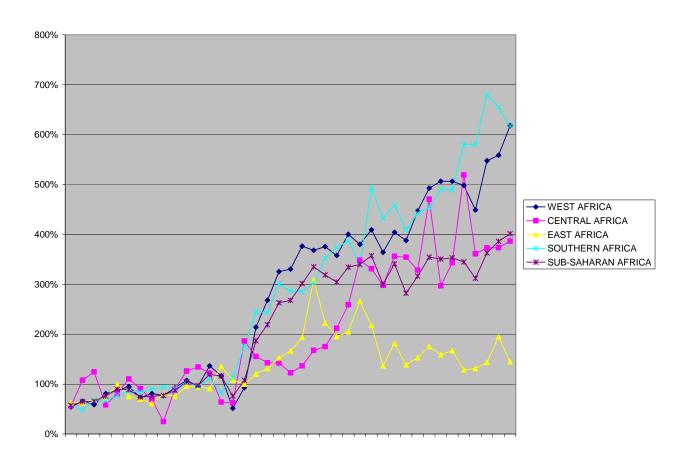
# Per Capita Rice Production

Average Value 1991–1999

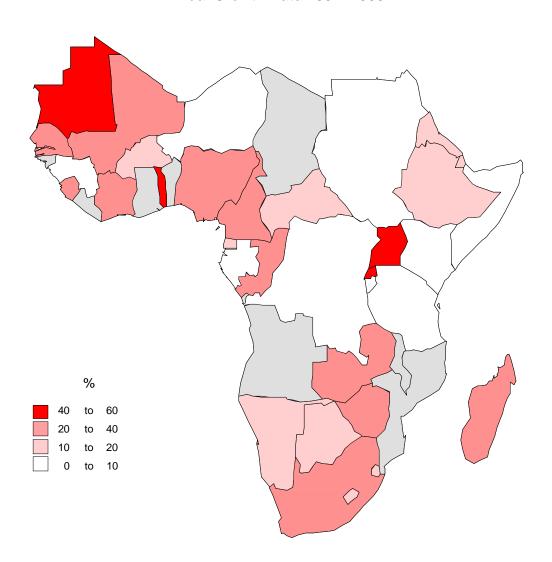


		Annual Grov	wth Rate			Yearly Average			
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE, PADDY, P									Value 2004
BENIN	19.79	6.67	3.64	19.51	1,686	10,822	8,317	22,300	70,000
BURKINA FASO	2.48	2.87	-1.18	10.26	34,889	38,660	40,783	74,475	95,168
CAMEROON	11.27	23.05	-1.94	-1.85	13,042	35,044	71,143	67.665	62,000
CHAD	4.98	-5.31	20.92	7.13	32,386	37,197	41,419	101,029	109,000
COTE DIVOIRE	7.51	4.22	6.37	6.37	270,620	433,700	529,940	996,412	1,150,000
GAMBIA	2.02	-0.51	-5.27	5.73	33,584	28,504	26,664	21,048	22,000
GHANA	8.35	5.66	5.11	4.92	43,483	78,910	71,790	182,974	241,807
GUINEA	4.61	0.66	-3.29	5.61	310,800	403,893	390,929	637,146	900,000
GUINEABISSAU	-4.68	4.36	3.16	0.45	44,250	42,100	102,500	127,227	127,000
LIBERIA	4.94	2.15	-1.80	12.12	141,300	234,900	279,249	130,435	110,000
MALI	-1.77	2.85	10.19	8.55	164,870	182,676	219,625	577,723	877,000
MAURITANIA	4.11	19.09	16.81	11.33	643	4,467	34,571	71,959	77,000
NIGER	20.78	-2.12	7.48	-0.89	22,145	30,547	57,051	66,448	76,500
NIGERIA	9.30	7.29	10.50	0.89	264,100	533,200	1,758,132	3,111,700	3,542,000
SENEGAL	2.09	2.71	4.40	1.92	106,591	92,831	141,131	178,347	264,500
SIERRA LEONE	6.35	1.80	0.18	-7.49	396,708	532,430	492,300	385,500	265,000
TOGO	-2.74	-0.97	9.51	14.58	19,650	15,534	19,834	58,274	68,100
WEST AFRICA	5.19	3.76	5.75	2.90	1,900,746	2,735,414	4,285,379	6,810,660	8,057,075
CENTRAL AFRICA, RICE, PADD									Value 2004
BURUNDI	4.14	8.85	20.73	4.80	2,995	6,629	23,000	44,839	64,532
CENT AFR REP	14.04	9.36	-3.96	14.82	6,632	11,192	12,912	13,400	29,700
CONGO, DEM R	14.47	2.30	5.38	-2.40	103,637	208,970	312,297	384,781	315,130
CONGO, REP	6.63	-8.51	-9.90	-21.12	5,075	4,440	1,426	871	1,500
GABON	-6.32	1.30	-5.03	-0.06	659	640	682	800	1,000
RWANDA		11.34	4.15	-4.84	340	2,758	6,927	10,121	46,191
CENTRAL AFRICA	13.81	2.65	5.73	-1.32	119,337	234,629	357,244	454,811	458,053
EAST AFRICA, RICE, PADDY, PI	RODUCTION (f)								Value 2004
COMOROS	1.53	5.45	1.37	0.46	10,700	11,400	13,420	16,850	17,000
KENYA	7.17	2.93	1.34	-1.57	17,252	36,813	41,521	50,384	50,000
MADAGASCAR	2.82	0.94	1.89	-0.03	1,670,903	1,990,106	2,179,437	2,447,720	3,030,000
MALAVA	15.45	3.03	2.27	9.52	9,984	62,750	35,523	63,853	49,722
SOMALIA		33.33	4.19	-24.86	100	6,210	12,780	4,065	0
SUDAN	11.84	5.99	-22.61	7.93	1,820	8,038	2,790	1,715	15,748
TANZANIA	0.78	6.05	14.47	3.32	120,605	274,700	491,846	644,224	647,000
UGANDA	12.47	2.69	11.45	4.75	4,900	18,510	25,800	80,100	140,000
EAST AFRICA	2.80	1.66	3.84	0.80	1,836,262	2,408,527	2,803,117	3,308,911	3,949,470
CONTREDUCE DECE DAD	DV DDODUCTION #								Value 2004
SOUTHERN AFRICA, RICE, PADI	-2.47	-8.28	-16.80	20.27	25,904	19,297	5,600	14,550	Value 2004 16,000
ANGOLA	-2.47	-o.2o -7.38	2.47	19.03					
MOZAMBIQUE	-U.23 -1.27	-7.38 2.24	0.00	-0.33	89,768	86,074	87,736	122,292	201,000
SOUTH AFRICA					2,043	2,900	3,000	2,980	3,200
SWAZILAND	4.09	-1.45	4.94	-34.14	6,279	5,039	2,678	999	170
ZAMBIA	 10.00	23.24	10.46	1.20	106	1,527	8,818	11,691	12,000
ZIMBABWE SOUTHERN AFRICA	16.86 <b>-0.07</b>	-21.11 - <b>6.80</b>	13.91 <b>1.80</b>	-1.71 <b>15.74</b>	2,757 <b>126,857</b>	823 <b>115,660</b>	387 <b>108,219</b>	425 <b>152,937</b>	600 <b>232,970</b>
JOUTHLIN HINGM	-0.07	-0.00	1.00	13.74	120,037	113,000	100,213	132,337	232,370
SUB-SAHARAN AFRICA, RICE, I									Value 2004
SUB-SAHARAN AFRICA	4.14	2.55	5.00	2.22	3,983,386	5,494,771	7,553,793	10,724,421	12,713,948
WORLD, RICE, PADDY, PRODUC	CTION (f)								Value 2004
WORLD	3.88	2.69	2.40	1.72	264,585,798	352,334,015	467,400,944	558,393,584	605,758,530

# Import Index Average 1970–1975 = 100



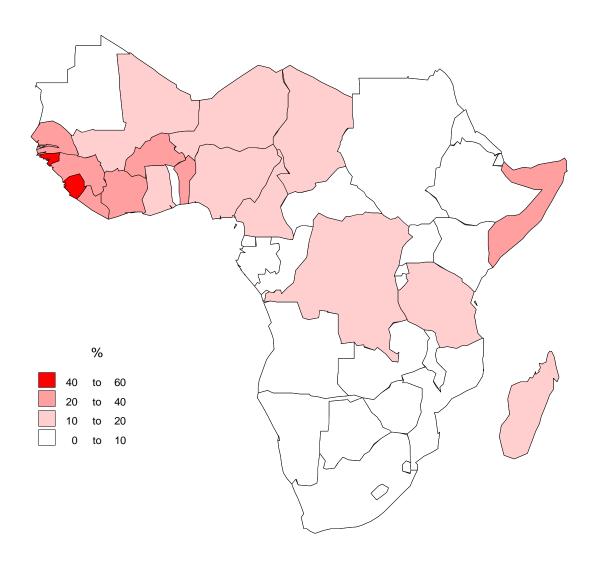
### Imports Volume Annual Growth Rate 1991–1999



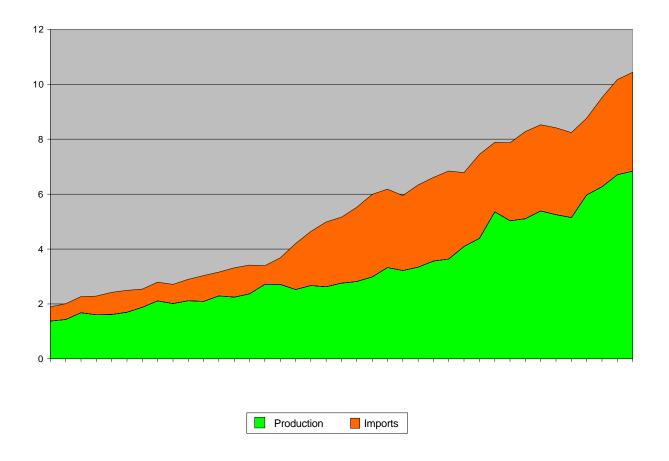
		Annual Grov	vth Rate			Yearly Average			
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE (MILLED EQU				100.00					Value 2003
BENIN	4.84	3.43	13.32	-13.07	5,366	8,663	49,448	166,710	325,479
BURKINA FASO	-6.73	67.47	15.57	2.94	2,949	11,383	65,418	81,172	3,907
CAMEROON	3.42	-0.09	19.45	3.52	7,497	21,392	47,906	97,831	243,430
CHAD	-23.56	94.09	14.61	-17.06	132	1,531	11,175	7,112	296
COTE DIVOIRE	5.26	10.32	-1.21	-19.77	53,552	108,498	347,549	350,538	735,771
GAMBIA	4.43	17.42	8.51	-14.62	9,575	19,321	47,806	66,929	20,566
GHANA	3.82	3.50	17.94	-17.65	35,047	31,261	58,064	112,359	303,425
GUINEA	-4.71	21.25	14.83	-4.76	28,825	43,290	109,223	214,943	31,282
GUINEABISSAU	18.39	-4.44	9.80	-9.82	8,826	22,460	30,605	51,699	28,577
LIBERIA	4.86	7.08	-1.07	-22.14	36,539	52,210	91,629	69,831	100,601
MALI		-9.37	-3.75	5.94	3,492	27,725	69,597	34,545	28,059
MAURITANIA	4.99	12.94	2.48	25.30	11,430	27,358	65,038	16,437	38,658
NIGER	-29.86	100.48	-1.08	2.24	1,090	9,205	34,735	48,260	158,195
NIGERIA	-4.80	142.09	-10.67	11.42	1,187	205,907	390,489	471,254	761,879
SENEGAL	2.83	7.43	0.45	5.65	145,515	224,000	351,349	461,167	890,044
SIERRA LEONE	22.75	16.74	11.56	6.50	21,790	29,662	79,767	195,590	11,905
TOGO	-3.59	36.41	0.42	16.33	2,826	7,205	22,193	22,621	47,817
WEST AFRICA	4.51	16.01	0.42	1.08	375,637	851.070	1.871.990	2,468,998	3,729,891
WEST AFRICA	4.31	10.01	10.07	1.00	3/3,03/	031,070	1,07 1,550	2,400,550	3,723,031
CENTRAL AFRICA, RICE (MILLED	FAIRUAL FUT: IMPA	DTC 40							Value 2003
	-21.13	3.97	-28.45	1.21	1.057	1,093	786	2.570	296
BURUNDI	-21.13 16.97	14.22		8.48	1,057 159	1,093		2,579 1.602	
CENT AFR REP			10.64				2,993		2,559
CONGO, DEM R	-9.92	0.11	16.16	-17.27	23,057	31,847	56,859	51,546	81,718
CONGO, REP	8.51	3.56	4.42	7.58	1,429	2,678	9,910	30,917	16,192
GABON	5.73	14.04	5.81	-2.80	1,646	4,726	12,716	32,274	35,536
RWANDA		21.63	-3.30	9.50	763	2,050	5,796	11,059	12,119
CENTRAL AFRICA	4.89	2.87	11.35	-2.25	28,111	42,535	89,060	129,977	148,420
EAST AFRICA, RICE (MILLED EQUI	IVALENT) IMPORTO	44)							Value 2003
COMOROS	5.89	-1.12	1.00	-1.69	9.597	14,458	25,350	30,509	17,390
	-23.83		3.20	2.91	3,111	3,594			191,654
KENYA	-23.03	8.28	-16.68	17.47	16,091		24,657 153,825	41,815	254,300
MADAGASCAR						85,571		60,177	
MALAWI	0.70	43.72	5.66	-15.09	250	387	691	1,927	4,017
SOMALIA	-0.78	-0.41	-1.96	-2.06	21,483	31,763	74,153	81,760	0 24 700
SUDAN	12.26	-3.07	12.19	-3.37	6,162	6,504	31,972	26,263	31,709
TANZANIA	-3.70	25.46	-8.47	1.43	13,922	39,612	68,381	70,943	189,621
UGANDA	-4.02			58.08	6,360	4,685	5,160	10,881	48,925
EAST AFRICA	3.42	9.44	-8.43	4.37	67,378	172,116	358,840	293,765	737,616
		ADTO #15							V-I 2002
SOUTHERN AFRICA, RICE (MILLEE		- 11	7.00	10.70	3 000	34.040	E0 442	EC 137	Value 2003
ANGOLA	14.02	78.14	7.03	-10.78	2,066	21,918	59,443	56,147	43,879
MOZAMBIQUE	C 45	225.89	-1.06	-5.67	75	38,492	78,173	62,730	159,350
SOUTH AFRICA	6.15	4.96	6.15	10.28	66,254	99,812	212,949	394,391	790,842
SWAZILAND	45.44		48.06	5.41	0	0	1,675	8,121	1,384
ZAMBIA	15.41	4.58		11.25	2,801	5,789	4,554	4,243	17,407
ZIMBABWE	12.81	1.52	9.43	4.51	3,140	4,362	10,273	17,615	17,026
SOUTHERN AFRICA	6.85	15.95	4.87	5.19	74,337	170,372	367,067	543,248	1,029,888
									V I 2000
SUB-SAHARAN AFRICA, RICE (MIL			0.17	4.00	070 ***	4 007 057	0.001.700	0.400.000	Value 2003
SUB-SAHARAN AFRICA	3.52	13.07	-0.17	1.33	678,111	1,397,357	2,884,762	3,166,909	5,039,303
LUADI D. DIOC ACT.									V-I 2002
WORLD, RICE (MILLED EQUIVALE		E 0.1	0.04	c 20	6 343 443	7 044 040	0.000.407	44.004.074	Value 2003
WORLD	1.54	5.04	0.84	6.39	6,243,412	7,841,918	9,699,487	14,264,674	25,310,670

### **Rice Import Value**

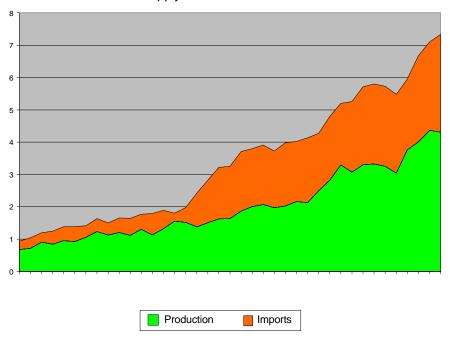
As Percentage of Total Imports of Agricultural Products
Annual Growth Rate 1991–1999



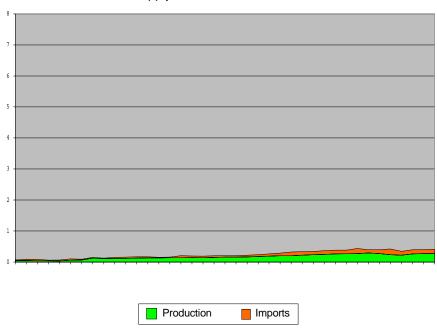
### Rice Supply and Demand in Sub-Saharan Africa



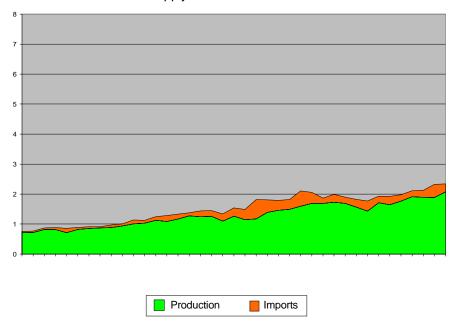
Rice Supply and Demand in West Africa



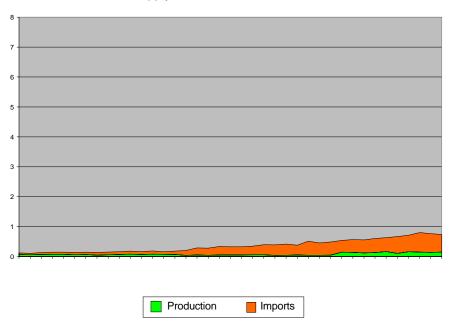
Rice Supply and Demand in Central Africa



Rice Supply and Demand in East Africa

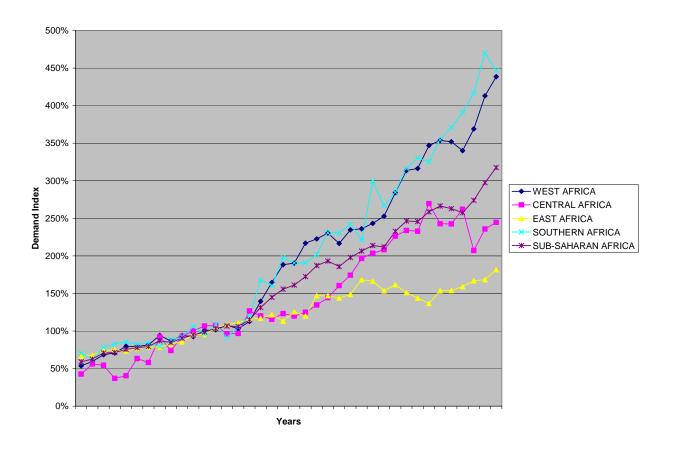


### Rice Supply and Demand in Southern Africa

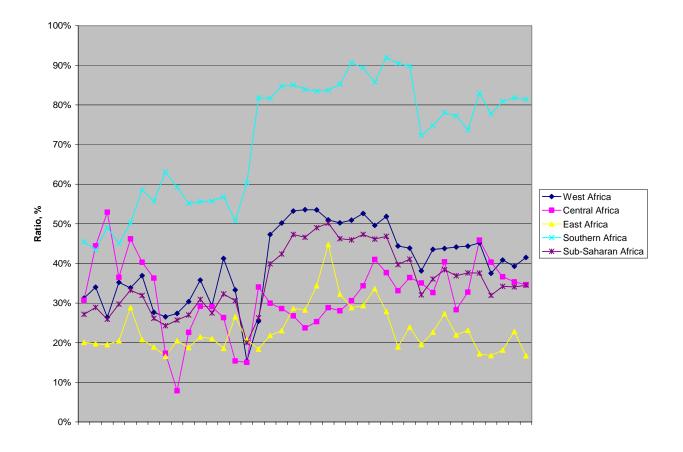


### **Rice Demand Index**

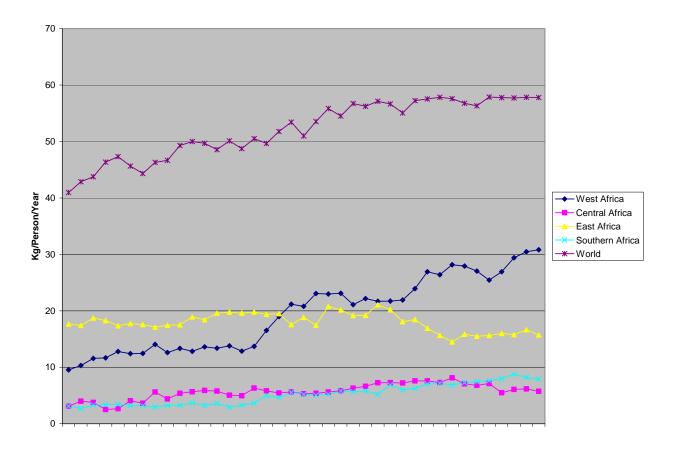
Average 1970–1975 = 100



# Imports as a Proportion of Total Consumption

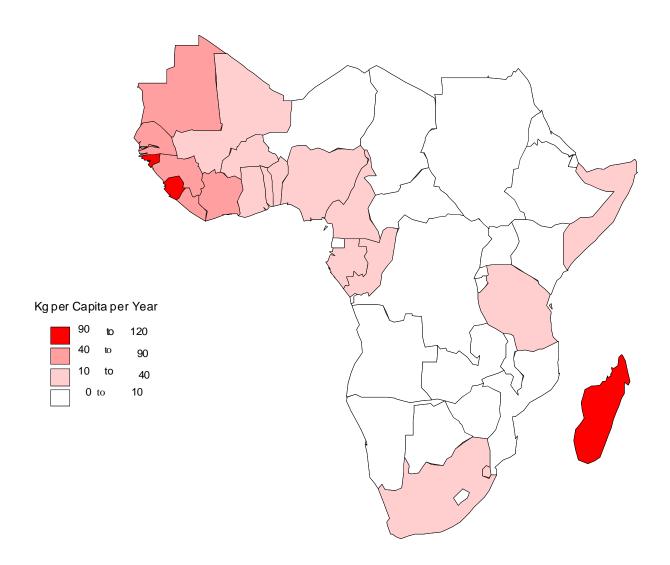


# **Per Capita Rice Consumption**



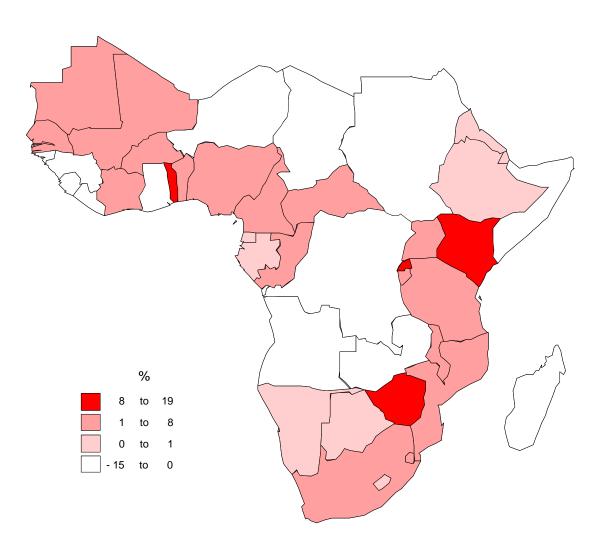
### **Per Capita Rice Consumption**

Mean Value 1991-1999



### **Per Capita Rice Consumption**

Annual Growth Rate 1991–1999



		Annual Grov	vth Rate			Yearly Average			
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE (MILLED EQ	UIVALENT) IMPORTS	VALUE ('000' US	\$)						Value 2003
BENIN	8.11	7.85	11.47	-13.54	872	2,301	14,400	48,300	75,614
BURKINA FASO	-8.61	81.29	16.25	3.19	455	4,007	20,768	31,250	1,111
CAMEROON	6.69	10.57	18.14	-6.15	1,180	5,471	11,369	16,675	56,247
CHAD	-9.43	84.28	14.79	-11.08	23	692	4,313	3,243	65
COTE DIVOIRE	4.82	26.47	-1.71	-19.17	6,932	34,771	92,492	99,495	156,977
GAMBIA	5.59	27.28	4.47	-18.64	1,190	3,910	9,042	17,156	5,400
GHANA	1.81	12.63	12.62	-13.68	7,081	9,810	18,048	28,366	66,356
GUINEA	-3.40	28.92	6.01	-4.66	4,552	14,796	25,052	48,840	6,685
GUINEABISSAU	19.33	3.63	6.91	-8.47	1,263	5,721	9,600	15,188	5,255
LIBERIA	9.26	15.19	-4.58	-25.56	6,309	17,560	36,381	24,940	20,197
MALI		2.21	-7.80	1.31	499	11,069	20,939	10,803	7,836
MAURITANIA	6.33	29.55	-2.52	29.08	1,482	5,664	17,113	5,339	13,739
NIGER	-20.81	117.20	-5.06	0.48	146	3,838	14,300	17,884	25,674
NIGERIA	-9.69	159.83	-19.36	14.10	249	108,610	156,194	151,240	160,213
SENEGAL	5.38	16.30	-0.31	9.55	17,027	48,121	79,123	109,369	217,386
SIERRA LEONE	22.50	29.47	11.83	9.50	2,919	9,224	26,667	63,250	2,974
TOGO	-1.46	45.72	-1.60	4.76	419	1,750	6,757	3,680	3,869
WEST AFRICA	5.78	31.78	4.19	1.34	52,595	287,315	562,557	695,016	825,598
CENTRAL AFRICA, RICE (MILLEI									Value 2003
BURUNDI	-17.88	24.41	-27.78	7.75	151	407	493	999	57
CENT AFR REP	19.33	19.04	7.84	-3.08	37	71	1,245	430	560
CONGO, DEM R	-5.53	3.69	23.15	-16.60	3,400	8,012	16,646	21,966	32,338
CONGO, REP	9.52	22.15	5.26	-1.65	222	957	3,640	7,001	3,711
GABON	9.56	34.36	2.32	-5.60	280	2,551	6,057	10,274	11,697
RWANDA		41.41	-6.38	2.55	161	1,084	3,305	3,742	3,162
CENTRAL AFRICA	-0.85	13.11	11.91	-7.03	4,251	13,082	31,387	44,412	51,525
EAST AFRICA, RICE (MILLED EQ	HIVAL ENT. IMPORTO	WAL HE GOOD HE	Φì						Value 2003
COMOROS	7.01	8.43	0.22	0.28	1,355	3,751	6,610	8,206	4,625
KENYA	-23.74		1.27	2.59	646	1,076	7,478	12,832	36,211
	-23.74	21.23	-14.76	13.01	2.058	23,952	41,500	16,214	48,693
MADAGASCAR MALAVM		51.46	12.02	-24.61	2,030	23,992	249	1,217	40,633
	3.36	11.96	-2.54	-6.22	3,344	9,628	22,907	25,530	500
SOMALIA	18.18	8.53	8.37	-3.22	1,066	2,154	10,937	25,530	7,393
SUDAN	-2.03	39.35		-3.22					
TANZANIA	-2.03		-13.17	-3.05 54.09	2,248	16,670 1,746	24,414	20,541 3,860	34,064
UGANDA EAST AFRICA	5.67	20.48	 -8.46	0.69	1,287 <b>12,049</b>	59,206	1,830 <b>115,925</b>	98,547	13,146 <b>144,720</b>
LAST MINICA	3.01	20.40	-0.40	0.03	12,043	33,200	113,323	30,347	144,720
SOUTHERN AFRICA, RICE (MILLI	D EQUIVALENT) IMP	ORTS VALUE ('00	0' US \$)						Value 2003
ANGOLA	16.32	89.33	2.19	-16.03	427	8,769	18,116	17,399	9,824
MOZAMBIQUE			1.83	-6.82	4	11,303	23,774	20,820	30,244
SOUTH AFRICA	10.44	13.43	-0.57	9.78	11,093	35,039	67,743	112,463	156,390
SWAZILAND			44.34	8.24	0	0	562	3,445	583
ZAMBIA	18.53	9.83		8.82	507	1,895	1,412	1,539	6,123
ZIMBABWE	16.51	10.66	6.03	6.81	546	1,526	2,817	7,224	4,077
SOUTHERN AFRICA	11.18	23.76	0.83	3.83	12,576	58,531	114,423	162,888	207,241
JB-SAHARAN AFRICA, RICE (MILLED EQUIVALENT) IMPORTS VALUE ('000' US \$)							Value 2003		
SUB-SAHARAN AFRICA	5.80	26.48	-3.92	1.13	98,117	462,909	877,659	922,464	1,127,493
WORLD, RICE (MILLED EQUIVAL	ENT) IMPODTS YAL II	IE ('AAA' DIS \$)							Value 2003
	/ H+H VKIJ VMLU	- 1000 00 p)							, arao 2000

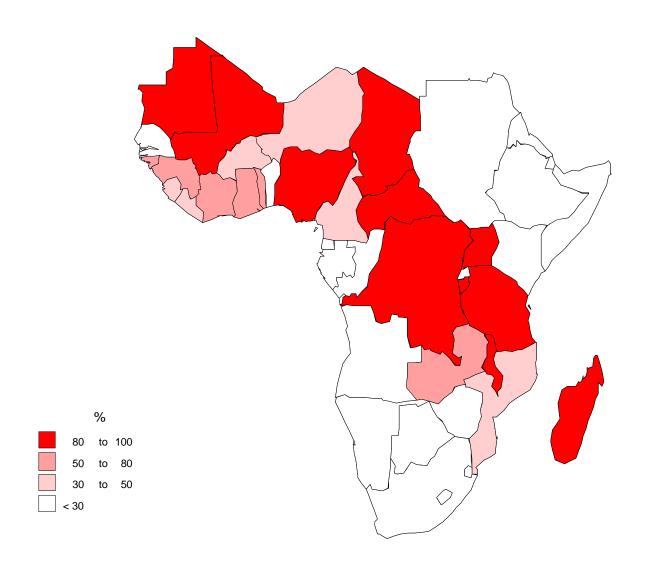
		Annual Grov	wth Rate			Yearly Average			
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE & PRODU	CT (MILLED EQUIVALE	NT), TOTAL CON	SUMPTION (t)						Value 2002
BENIN	7.39	3.41	7.82	7.21	5,889	12,613	43,677	72,307	129,682
BURKINA FASO	1.94	11.45	9.68	6.14	23,258	33,588	94,413	133,662	74,300
CAMEROON	11.16	13.98	7.47	3.59	14,780	39,910	89,427	142,533	234,347
CHAD	4.79	-5.71	10.78	1.78	18,268	22,462	33,205	64,892	81,845
COTE DIVOIRE	9.41	8.58	1.94	6.25	183,178	324,909	631,318	892,701	1,031,012
GAMBIA	2.68	4.32	4.93	1.50	27,969	37,658	64,904	86,355	57,533
GHANA	2.95	3.78	8.66	-1.20	56,502	71,596	103,835	262,328	473,486
GUINEA	4.47	3.36	1.33	3.14	168,730	227,526	300,077	509,287	665,598
GUINEABISSAU	1.49	-0.35	4.35	-0.18	34,541	46,195	84,734	119,096	120,338
LIBERIA	5.54	3.62	-1.16	-5.39	115,188	186,523	251,057	131,901	171,253
MALI	-0.03	4.55	6.37	8.10	90,984	130,520	183,708	340,148	513,992
MAURITANIA	5.20	15.24	8.01	5.40	11,482	32,442	83,389	116,788	87,317
NIGER	16.08	9.18	4.69	0.43	13,604	27,082	70,711	84,725	100,185
NIGERIA	10.88	20.13	3.80	3.85	138,353	468,413	1,324,916	2,260,779	2,944,001
SENEGAL	3.90	7.63	1.73	4.95	201,805	271,909	419,431	555,952	742,926
SIERRA LEONE	8.80	4.12	1.98	0.59	222,401	312,685	344,776	394,717	350,211
TOGO	-1.82	10.77	6.59	17.05	13,273	15,034	32,667	76,111	96,136
WEST AFRICA	6.00	8.48	3.34	3.94	1,340,202	2,261,066	4,156,247	6,244,283	7,874,160
CENTRAL AFRICA, RICE & PRO	ODUCT (MILLED EQUIVA	ALENT) TOTAL C	ONSUMPTION (t)						Value 2002
BURUNDI	-4.00	9.03	19.79	5.50	2,509	4,437	12,284	26,464	33,508
CENT AFR REP	15.86	10.11	2.03	7.39	3,553	6,811	9,469	11,096	18,810
CONGO, DEM R	8.92	1.74	7.63	-3.62	83,572	154,413	240,485	276,110	249,059
CONGO, REP	7.26	0.45	1.09	6.77	4,516	5,307	10,253	30,936	55,066
GABON	3.35	12.58	5.37	0.64	1,972	4,935	12,684	32,105	40,575
RWANDA		16.81	1.91	4.16	966	3,685	9,894	14,793	25,489
CENTRAL AFRICA	8.78	2.67	7.34	-1.15	97,089	179,588	295,069	391,504	422,507
EAST AFRICA, RICE & PRODUC				4.70	44.404	00.500	00.500	40.050	Value 2002
COMOROS	3.32	3.42	2.97	1.79	14,434	20,539	33,539	42,359	41,920
KENYA	3.89	3.60	-8.05	21.28	11,882	26,632	44,633	73,051	174,258
MADAGASCAR	3.02	1.99	0.37	2.79	732,667	989,848	1,273,293	1,292,338	1,614,594
MALAWI	21.73	4.39	3.91	8.18	4,657	30,957	20,235	38,993	62,782
SOMALIA	-0.67	3.20	-1.56	-1.39	21,529	35,359	81,705	84,064	0
SUDAN	8.22	-0.83	7.99	-1.58	6,378	11,700	33,109	26,811	39,986
TANZANIA	0.43	9.11	10.86	3.95	80,576	196,267	357,542	455,865	536,661
UGANDA	-0.29	6.41	4.77	12.18	8,951	15,421	20,122	61,180	112,909
EAST AFRICA	2.80	3.14	2.16	3.58	881,074	1,326,723	1,864,177	2,074,661	2,583,110
SOUTHERN AFRICA, RICE & PR	ODUCT (MILLED FOUR	ALENT) TOTAL	CONCUMENTAL (4)						Value 2002
ANGOLA	-2.21	23.28	5.48	, -7.97	14,899	31,365	61,322	63,143	43,361
MOZAMBIQUE	-2.21	9.53	0.38	6.69	50,749	88,609	128,315	130,453	152,677
SOUTH AFRICA	5.70	5.23	7.73	6.28	67,086	100,502	213,448	455,111	591,860
SWAZILAND	-16.49	50.69	20.73	6.12	114	1,247	3,393	10,066	15,620
ZAMBIA	16.45	6.32	0.25	0.12	2,894	6,839	9,991	11,888	28,152
ZIMBABWE	14.49	-1.39	9.51	8.51	4,760	4,793	10,341	20,182	20,152
SOUTHERN AFRICA	3.06	-1.39 <b>8.89</b>	5.15	4.74	4,760 <b>140,502</b>	233,356	426,810	690,842	853,450
SOUTHERN MERICA	J.00	0.03	3.13	4.74	140,302	233,330	420,010	030,042	033,430
SUB-SAHARAN AFRICA, RICE	& PRODUCT (MIL) ED F	QUIVALENT) TOT	AL CONSUMPTIO	N (t)					Value 2002
SUB-SAHARAN AFRICA	4.54	6.48	3.50	3.51	2,428,911	3,897,201	6,555,556	9,091,971	11,388,236
	1	3,1,2	3.22		_,,	-,,		-,,	,,
WORLD, RICE & PRODUCT (MI		TAL CONSUMPT							Value 2002
WORLD	3.53	2.45	2.28	1.44	153,583,161	207,037,903	274,032,276	327,836,969	355,653,078

		<b>Annual Grov</b>	vth Rate		•	Yearly Average			
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE & PRODUC	T (MILLED EQUIVALEN	T), PER CAPITA	CONSUMPTION (I	(g per Year)					Value 2002
BENIN	5.31	0.90	4.60	4.10	2.37	4.06	10.55	13.08	19.80
BURKINA FASO	-0.07	8.78	6.72	3.60	4.70	5.32	11.64	12.63	5.90
CAMEROON	8.69	10.92	4.49	0.91	2.44	5.09	8.73	10.63	14.90
CHAD	2.95	-7.62	8.24	-1.41	5.40	5.57	6.41	9.53	9.80
COTE DIVOIRE	5.36	4.38	-1.54	3.10	38.74	46.21	62.99	64.30	63.00
GAMBIA	-0.10	0.99	1.06	-1.92	68.14	67.31	83.75	76.52	41.50
GHANA	0.66	1.56	5.03	-3.59	7.19	7.24	7.84	14.88	23.10
GUINEA	2.15	2.04	-1.19	0.05	47.49	54.20	59.24	71.45	79.60
GUINEABISSAU	1.97	-4.80	2.44	-2.26	65.73	71.82	95.21	108.91	83.00
LIBERIA	2.53	0.54	-2.20	-9.04	93.97	113.61	117.73	59.16	52.90
MALI	-2.24	2.27	3.46	5.44	18.36	20.85	22.71	33.23	40.70
MAURITANIA	3.00	12.51	5.22	2.56	10.28	22.76	46.01	49.09	31.10
NIGER	12.51	5.97	1.39	-2.86	3.59	5.46	10.48	9.15	8.70
NIGERIA	8.03	16.93	1.40	1.14	2.76	7.08	15.83	22.38	24.30
SENEGAL	1.16	4.59	-1.09	2.35	54.59	55.01	64.83	65.43	75.40
SIERRA LEONE	6.96	2.07	-0.23	-0.58	89.73	105.11	94.74	93.10	73.50
	-4.99	8.04	3.47	14.17	7.87	6.34	10.49	18.07	20.00
TOGO									
WEST AFRICA	3.39	5.66	0.63	1.25	13.07	16.99	24.01	28.49	30.07
									V-I 2002
CENTRAL AFRICA, RICE & PROI						4.47	0.40	4.00	Value 2002
BURUNDI	-5.74	7.21	16.40	3.99	0.78	1.17	2.46	4.32	5.10
CENT AFR REP	13.70	7.64	-0.36	4.85	2.05	3.22	3.60	3.29	4.90
CONGO, DEM R	5.88	-1.15	4.24	-6.49	4.61	6.53	7.36	6.15	4.90
CONGO, REP	4.63	-2.34	-1.75	3.51	3.96	3.61	5.26	11.68	15.20
GABON	3.09	8.95	2.20	-2.09	3.99	8.02	15.42	29.48	31.10
RWANDA		13.44	-1.13	1.82	0.27	0.78	1.64	2.49	3.10
CENTRAL AFRICA	5.96	-0.13	4.01	-3.81	3.46	4.97	5.98	6.07	5.19
									V-I 2002
EAST AFRICA, RICE & PRODUCT	• • • • • • • • • • • • • • • • • • • •	•			50.07	C2.00	70.07	CO 75	Value 2002
COMOROS	0.75	-0.10	-0.18	-1.13	58.87	62.88	73.37	68.75	56.10
KENYA	0.58	-0.20	-10.96	18.09	1.19	1.89	2.27	2.59	5.50
MADAGASCAR	0.54	-0.88	-2.48	-0.40	118.51	124.66	118.42	92.62	95.40
MALAVM	18.74	1.10	-0.68	6.12	1.11	5.75	2.66	3.85	5.30
SOMALIA	-3.09	-2.31	-2.87	-3.10	6.72	7.82	12.51	12.89	0.00
SUDAN	5.90	-3.80	5.48	-4.00	0.50	0.72	1.52	0.99	1.20
TANZANIA	-2.51	5.82	7.43	0.79	6.76	11.95	15.85	14.96	14.80
UGANDA	-4.30	3.31	2.46	8.51	1.09	1.33	1.34	3.03	4.50
EAST AFRICA	-0.10	-0.10	-0.77	0.90	15.31	17.13	17.64	15.08	15.68
CONTRIEDU AFRICA DIOF O DO	DUCT AMIL ED FAMIL	LI FUT DED OAD	ITA COUCUIANTI	011 4K - D 11	>				Value 2002
SOUTHERN AFRICA, RICE & PRO		· ·				4.00	7.40	5.04	
ANGOLA	-3.64	20.37	2.63	-11.19	2.86	4.83	7.46	5.84	3.30
MOZAMBIQUE	-2.65	6.72	-0.94	3.94	6.02	8.14	9.55	7.54	8.20
SOUTH AFRICA	3.05	2.52	5.72	3.76	3.32	3.84	6.39	11.81	13.20
SWAZILAND	-18.56	46.35	17.32	3.86	0.31	2.37	4.93	11.49	14.60
ZAMBIA	13.11	2.92	-2.17	-3.63	0.76	1.37	1.54	1.40	2.60
ZIMBABWE	10.84	-4.30	5.93	6.71	1.02	0.77	1.20	1.80	1.70
SOUTHERN AFRICA	0.54	6.00	2.96	2.15	3.31	4.20	6.03	7.92	8.44
CUD CAUADAN AFRICA PIOS A	DDODUCT AND LED SO	IIIVAI FUT) PER	CADITA CONOUR	IDTION 416 - D	W)				Volue 2002
SUB-SAHARAN AFRICA, RICE &	PRODUCT (MILLED EQ 1.86	UIVALENT) PER 1 3.57	CAPITA CONSUM 0.32	12 TION (Kg Pa 0.77	er Year) 10.80	13.23	16.77	16.95	Value 2002 17.90
SUB-SAHARAN AFRICA	1.86	3.37	0.32	0.77	10.80	13.23	10.77	10.93	17.90
WORLD, RICE & PRODUCT (MILI	LED EQUIVALENT) PFR	CAPITA CONSIII	MPTION (Ka Per	Year)					Value 2002
WORLD	1.45	0.62	0.54	0.09	45.35	50.35	56.05	57.51	57.30

		Annual Grov	wth Rate			Yearly Average			
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE (MILLED EQUIV	VALENT), SELF-RE	LIANCE RATIO (9	6)						Value 2002
BENIN	20.82	0.45			8.65	33.06	-8.03	-157.85	4.24
BURKINA FASO	1.08	-7.91	-7.64	5.38	86.65	71.94	33.93	38.49	-176.88
CAMEROON			-8.12		44.33	38.75	48.40	34.16	11.53
CHAD	0.35	-3.44	1.91	3.33	99.13	91.18	60.68	88.86	99.98
COTE DIVOIRE	1.24	-0.45	3.11	3.70	70.00	69.04	44.58	59.88	30.36
GAMBIA	-1.09	-10.05		4.48	65.72	51.01	28.18	26.34	-20.80
GHANA	-5.90	0.25	-7.71	18.01	38.85	58.35	46.68	57.91	33.55
GUINEA	1.48	-4.55	-7.10	4.32	82.59	81.74	64.53	57.07	50.12
GUINEABISSAU	-5.40	4.30	-2.64	6.94	75.46	51.11	64.63	56.71	39.34
LIBERIA	0.26	-1.41	-0.23	18.07	68.44	72.53	63.69	50.32	40.34
MALI	-1.95	2.15	4.06	0.29	96.20	79.39	62.48	89.39	89.92
MAURITANIA				-0.92	0.47	14.38	20.22	86.42	53.44
NIGER	2.89	-14.38			88.36	74.71	49.53	43.48	-104.09
NIGERIA	0.12	-13.62	6.19	-1.85	99.00	71.46	69.07	79.73	57.61
SENEGAL	1.21	3.36	7.98		27.52	18.16	16.05	17.33	-6.63
SIERRA LEONE	-0.67	-1.02	-2.26	-4.14	90.92	91.16	77.40	50.60	30.64
TOGO	0.06	-10.89	7.59	-0.74	78.05	60.45	31.46	71.40	32.79
WEST AFRICA	0.56	4.10	2.04	1.60	71.80	64.85	54.55	60.11	39.15
CENTRAL AFRICA, RICE (MILLED E	OUIVALENT) SELF	-RELIANCE RATIO	) (%)						Value 2002
BURUNDI	11.20	2.75	1.33	0.33	60.45	76.13	91.93	89.59	99.90
CENT AFR REP	-0.01	-0.13	-2.04	0.45	95.62	97.99	68.58	85.79	84.06
CONGO, DEM R	4.90	0.58	-2.08	1.64	69.36	79.83	77.42	82.04	73.60
CONGO, REP	-0.10	-10.24			68.73	55.59	3.88	-0.07	-40.13
GABON	-13.06				17.61	6.38	0.09	-0.16	-118.93
RWANDA		-4.53	5.97			50.45	42.20	28.82	48.64
CENTRAL AFRICA	4.68	0.06	-1.42	0.46	68.39	76.67	70.46	67.08	41.33
EAST AFRICA, RICE (MILLED EQUIV	(ALENT) SELF-REL	IANCE RATIO (%	)						Value 2002
COMOROS	-5.37			7.71	33.75	29.15	24.03	27.47	31.16
KENYA	8.56	0.15			72.60	89.54	44.45	10.11	20.88
MADAGASCAR	-0.28	-0.69	2.40	-0.73	97.89	91.44	87.89	95.51	96.19
MALAWI	-0.16	-0.99	-0.52	1.78	94.19	97.88	96.93	93.11	90.87
SOMALIA		31.44	5.34		0.20	11.80	9.64	2.08	#DIV/0!
SUDAN		3.90			5.94	50.10	4.18	-3.09	13.65
TANZANIA	0.72	-2.44	4.07	0.42	81.83	81.74	79.21	84.16	85.74
UGANDA	7.14	-2.72	6.04	-5.10	28.66	72.16	72.69	84.54	61.92
EAST AFRICA	-0.03	-0.92	2.57	-0.20	92.36	87.20	80.62	85.90	84.98
SOUTHERN AFRICA, RICE (MILLED	FOUNTAL ENT) SEL	F.RFI IANCE DAT	IO (%)						Value 2002
ANGOLA	-2.53	-26.07			85.81	48.99	4.19	14.62	-15.69
MOZAMBIQUE	0.04	-16.19	2.21	15.27	99.86	65.05	39.42	48.82	50.23
SOUTH AFRICA		-10.13	2.21	-20.68	1.44	0.60	-0.67	15.01	-27.63
SWAZILAND	0.00	0.00	-12.68	2.90	100.00	100.00	65.99	21.86	-27.03
ZAMBIA		12.02	10.01	-6.55	2.10	15.22	58.52	64.11	26.44
ZIMBABWE	2.88	-24.83		43.87	33.48	8.78	1.11	10.82	-19.10
SOUTHERN AFRICA	-3.86	-14.29	-0.67	-1.47	47.48	30.46	13.91	21.48	-10.64
SUB-SAHARAN AFRICA, RICE (MILI	LED EQUIVALENT)	SELF-RELIANCE	RATIO (%)						Value 2002
SUB-SAHARAN AFRICA	0.37	-3.49	2.64	1.11	71.99	65.61	55.54	64.95	49.02
									Value 2002
WORLD, RICE (MILLED EQUIVALEN	T) SELF-RELIANCE	: RATIO (%)							Value ZUUZ

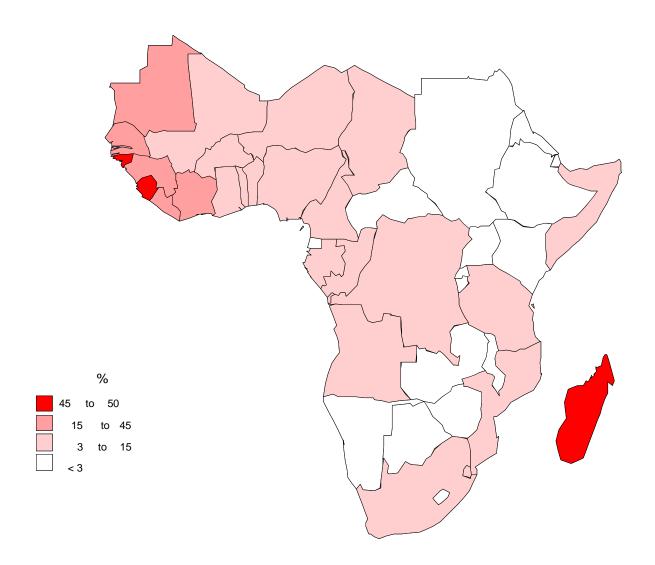
	Annual Growth Rate				Yearly Average				
	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	1961 - 1970	1971 - 1980	1981 - 1990	1991-00	Actual Value
WEST AFRICA, RICE (MILLED EQUIV	ALENT) SHARE IN	TERMS OF CAL	ORIE INTAKE (%)						Value 2002
BENIN	4.59	0.28	2.92	2.94	1.21	2.04	5.05	5.32	7.76
BURKINA FASO	-1.73	7.87	1.97	3.59	2.78	3.23	5.57	5.21	2.43
CAMEROON	7.83	11.14	4.83	0.51	1.15	2.18	4.01	4.91	6.60
CHAD	3.72	-2.81	13.87	-3.57	2.55	3.21	4.08	4.90	4.63
COTE DIVOIRE	3.50	1.87	-0.35	2.50	15.54	16.78	21.21	22.88	21.92
GAMBIA	0.30	4.30	-2.01	-2.80	28.61	34.12	34.63	29.41	17.88
GHANA	1.98	4.81	2.98	-5.79	3.25	3.15	3.69	5.53	8.00
GUINEA	2.24	1.63	0.27	-0.54	21.93	24.64	27.82	32.18	32.87
GUINEABISSAU	1.11	-3.35		-1.37	32.38	35.59	41.09	44.84	40.98
LIBERIA	1.79	-0.05		-8.61	41.84	46.82	48.49	28.53	28.06
MALI	-2.42	1.38	-1.87	5.53	8.78	10.80	11.49	14.85	18.76
MAURITANIA	3.07	10.88		1.91	5.00	10.95	18.08	18.55	10.96
NIGER	10.03	5.22		-3.69	1.81	2.49	4.78	4.47	3.89
NIGERIA	8.78	16.47		-0.27	1.53	4.08	8.55	8.42	9.04
SENEGAL	-0.06	4.48		2.53	21.66	23.73	28.13	27.96	32.71
SIERRA LEONE	3.52	0.93		-0.37	41.73	47.67	45.88	45.23	36.90
TOGO	-4.99	9.20		11.51	3.36	3.00	4.85	7.47	8.41
WEST AFRICA	2.97	5.78		-0.23	7.02	9.37	12.66	11.96	12,21
The state of the s	2.01	o	0	0.20	1102	0.01	12100	11100	12.21
CENTRAL AFRICA, RICE (MILLED EC	MINAL ENT) SHAR	E IN TERMS OF	CAL ORIE INTAKE (	963					Value 2002
BURUNDI	-5.82	6.92		6.35	0.33	0.51	1.13	2.27	2.75
CENT AFR REP	13.19	8.10		4.48	0.95	1.41	1.86	1.75	2.60
CONGO, DEM R	6.28	-0.52		-3.12	2.08	3.00	3.45	3.27	3.00
CONGO, REP	5.00	-8.37		3.07	1.88	1.38	1.82	5.37	6.98
GABON	1.55	7.38		-2.34	1.93	3.35	6.15	11.74	11.77
RWANDA	1.33	12.20		2.41	0.13	0.34	0.72	1.14	1.42
CENTRAL AFRICA	4.79	3.20		-2.60	1.85	2.66	3.57	3.84	4.00
CENTRAL AIRCA	4.73	3.20	4.74	-2.00	1.03	2.00	3.31	3.04	4.00
EAST AFRICA, RICE (MILLED EQUIV	ALENT) CHADE IN	TEDMS OF CAL	ODIE INTAKE (%)						Value 2002
COMOROS	0.54	1.00		-0.83	30.43	33.34	39.94	37.57	32.78
KENYA	0.16	-0.17		17.67	0.51	0.80	1.04	1.27	2.51
MADAGASCAR	-0.07	-0.6		0.11	51.01	51.79	50.37	46.45	48.54
MALAWI	16.95	1.88		4.29	0.49	2.37	1.25	1.82	2.41
SOMALIA	-3.39	-2.05		-3.04	3.87	4.51	6.62	8.36	#DIV/0!
SUDAN	4.52	-4.55		-4.99	0.26	0.33	0.69	0.44	0.60
TANZANIA	-2.26	1.97		1.94	3.67	5.51	6.78	7.19	7.29
UGANDA	-4.22	4.34		8.54	0.47	0.58	0.59	1.32	1.83
EAST AFRICA	-0.48	-0.19		0.34	5.37	5.91	5.98	5.54	5.73
LAST ALRICA	-0.40	-0.10	-0.33	0.41	3.31	3.31	3.50	3.34	3.73
SOUTHERN AFRICA, RICE (MILLED E	CHINAL FUT) SHA	DE IN TEDMS OF	CALODIE INTAKE	(%)					Value 2002
ANGOLA	-4.76	19.31		-11.87	1.52	2.32	3.96	3.21	1.59
MOZAMBIQUE	-2.31	6.30		2.19	3.16	4.17	5.21	4.20	3.97
SOUTH AFRICA	2.68	3.00		3.05	1.20	1.36	2.40	4.10	4.40
SWAZILAND	-18.74	41.40		3.85	0.138	0.95	1.86	4.10	6.20
ZAMBIA	12.06	3.11		-2.81	0.349	0.58	0.72	0.70	1.34
ZIMBABWE	10.76	-4.37		5.33	0.492	0.351	0.72	0.70	0.88
SOUTHERN AFRICA	10.76	52.95		11.88	0.492	0.351	0.93	2.28	2.58
SOUTHER AFRICA		JZ.J.	3.70	11.00	0.020	0.230	0.53	2.20	2.30
SUB-SAHARAN AFRICA, RICE (MILL	EN FOLINAL FUT	СНДОЕ IN ТЕРМ	S OF CAL ODIE INT	OKE (%)					Value 2002
SUB-SAHARAN AFRICA	1.60	3.29		0.04	5.123	6.276	7.796	7.756	8.019
OOD-OFMINION IN INCH	1.00	0.20	0.20	0.04	5.125	0.270	1.130	1.130	0.013
									+
WORLD, RICE (MILLED EQUIVALENT	I) SHARE IN TERM	S OF CALABIE I	NTAKE (%)			1			Value 2002

### **Self-Reliance Ratio** Mean Value 1991–1999



# **Rice Calorific Share**

Mean Value 1991-1999



### About the Consultative Group on International Agricultural Research (CGIAR)

The Consultative Group on International Agricultural Research (CGIAR) was founded in 1971 as a global endeavor of cooperation and goodwill. The CGIAR's mission is to contribute to food security and poverty eradication in developing countries through research, partnership, capacity building and policy support, promoting sustainable agricultural development based on the environmentally sound management of natural resources. The CGIAR works to help ensure food security for the twenty-first century through its network of 16 international and autonomous research centers, including WARDA. Together, the centers conduct research on crops, livestock, fisheries and forests, develop policy initiatives, strengthen national agricultural organizations, and promote sustainable resource management practices that help provide people world-wide with better livelihoods.

The CGIAR works in partnership with national governmental and non-governmental organizations, universities and private industry. The United Nations Development Programme, the United Nations Environment Programme, the World Bank, and the Food and Agriculture Organization of the United Nations sponsor the CGIAR. The CGIAR's over 50 members include developing and developed countries, private foundations, and international and regional organizations. Developing world participation has doubled in recent years. All members of the OECD (Organisation for Economic Co-operation and Development) Development Assistance Committee belong to the CGIAR.

The CGIAR is actively planning for the world's food needs well into the twenty-first century. It will continue to do so with its mission always in mind and with its constant allegiance to scientific excellence.

### **CGIAR Centers**

CIAT Centro Internacional de Agricultura Tropical (Cali, Colombia)
CIFOR Center for International Forestry Research (Bogor, Indonesia)

CIMMYT Centro Internacional de Mejoramiento de Maiz y Trigo (Mexico, DF, Mexico)

CIP Centro Internacional de la Papa (Lima, Peru)

ICARDA International Center for Agricultural Research in the Dry Areas (Aleppo, Syria)

ICLARM WorldFish Center (Penang, Malaysia)
ICRAF World Agroforestry Centre (Nairobi, Kenya)

ICRISAT International Crops Research Institute for the Semi-Arid Tropics (Patencheru, India)

IFPRI International Food Policy Research Institute (Washington, DC, USA)
 IITA International Institute of Tropical Agriculture (Ibadan, Nigeria)
 ILRI International Livestock Research Institute (Nairobi, Kenya)
 IPGRI International Plant Genetic Resources Institute (Rome, Italy)
 IRRI International Rice Research Institute (Los Baños, Philippines)

ISNAR International Service for National Agricultural Research (The Hague, Netherlands)

IWMI International Water Management Institute (Colombo, Sri Lanka)

WARDA The Africa Rice Center (Bouaké, Côte d'Ivoire)



Africa Rice Center (WARDA)

01 B.P. 2031, Cotonou, Côte d'Ivoire