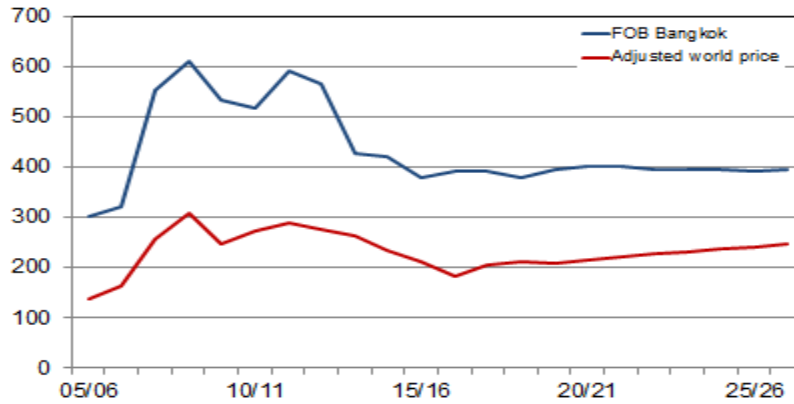


Rice

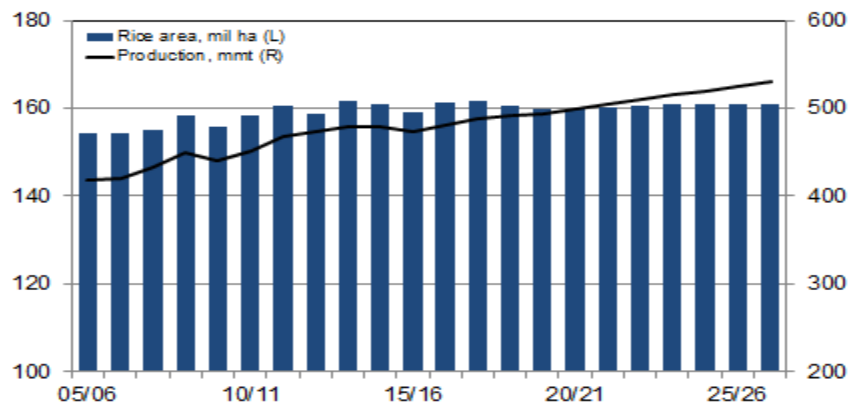
- The relatively thin rice market compared to other agricultural commodities and concentration of trade in Asia are factors that are contributing to the anomaly. Furthermore, different price series do not reflect consistent variety and quality factors, and prices can and do diverge in some years.
- The U.S. is a relatively small player in world rice markets and therefore has limited impact on prices. Supply and utilization in major Asian rice markets shape prices on the world market.
- While FOB Bangkok prices are expected to stabilize in dollar terms, prices denominated in many Asian currencies will increase, although not at a rapid pace when measured in inflation-adjusted terms.
- The U.S. dollar has strengthened substantially relative to many currencies. The dollar recently strengthened relative to the currencies of China, South Korea, Thailand, India, and other major Asian currencies. However, it weakened relative to the Japanese yen.
- Although there will be more currency adjustments in the baseline period, they are not expected to be as substantial as those that occurred in the past several years. This will contribute to the expected stability in rice prices.
- Rice area recovered this year following a dip in 2015/16 resulting in a seven mmt increase in global production, mainly from Thailand and India. With expectations of little upward pressure on prices for the next several years and the stabilization of the dollar relative to the currencies of many competing producers, area is expected to remain relatively flat.
- Rice yields are projected to increase at the same rate as they have historically. Even with little increase in area expected, the 1% annual increase in global rice yields will match and eventually outstrip the rate of population growth and with stable area, rice supplies will be adequate to meet population-induced demand growth.
- Rice consumption is expected to increase with global population growth being the primary driver, leaving per capita consumption nearly flat. Income impacts on rice in diets are different for different regions and income levels. As the traditional staple of Asia, the main consuming region, income impacts are quite small.
- In developed nations, income impacts on rice consumption are somewhat larger. In the U.S., for example, meals away from home are often ethnic cuisine that includes rice. Growing populations of Asians and Latin Americans have introduced their foods into the general American diet.
- Rice consumption is increasing in other regions of the world. Rice, while not the main staple, is also important in Latin American diets as it is in parts of Africa.

Rice Prices Have Limited Upward Potential

Rice prices, \$/mt

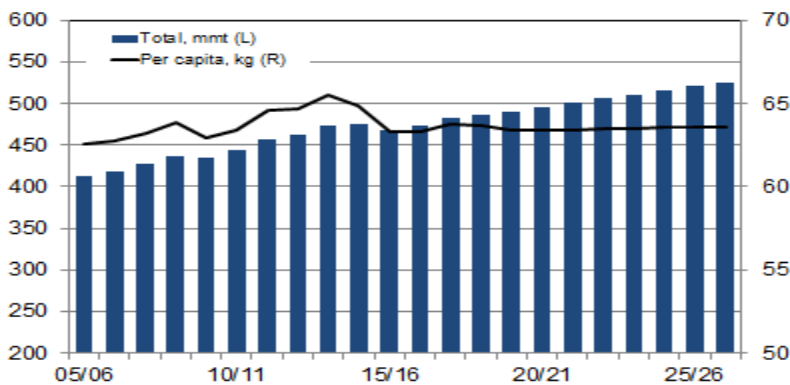


Rice Demand Growth Will Be Met By Productivity



Rice Maintains Importance in Diets

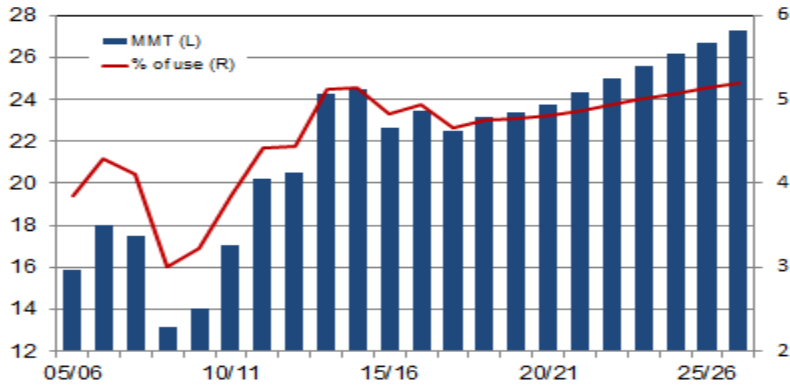
Global rice food use



- The level of self-sufficiency in rice consuming nations is high compared to other grains. Even modest changes in production can have relatively large impacts on trade and prices at export points.
- The proportion of the global crop that is traded is around 4%. Even with steady increases in rice demand expected over the next ten years, the proportion of trade compared to demand will be only around 5%.
- Thailand and India are the dominant rice exporters, accounting for more than 80% of rice exports. Rice trade is a vital source of export earnings for these countries.
- Rice imports are more broadly distributed than exports with trade expanding in all regions of the world. China is expected to be a consistent importer and with the EU will be among the largest importers. In addition Malaysia and Indonesia have steadily been increasing purchases on the world market for more than a decade and are comparable with the EU in purchases on the world market.
- Japan and South Korea are expected to continue importing at their committed tariff rate quota levels throughout the baseline period.
- Global ending stocks and stocks-to-us ratio are both expected to increase in 2016, but not as a result of the recovery of Thai and Indian supplies. Inventories from those two countries have been shrinking for the last few years, as they adjusted built-up carryover downward. This year's increase in ending stocks is primarily within China.
- As with other vital agricultural commodities, China's stock policy is to keep plenty of rice on hand to absorb production and price shocks, both domestic and abroad. This allows China to meet short-term domestic needs without having to face volatile prices on the world market. While China has not undertaken a major rice stock buildup as it has with other commodities such as cotton, wheat, and corn, it has steadily increased inventories over the past ten years.
- The rest of the world has a lesser ability to weather market disruptions. As such, rice prices will continue to have the potential to be more volatile than for many other commodities.
- With the outlook for stable prices resulting in smooth production and utilization patterns over the next ten years, it is expected that inventories will also be stable compared to consumption.

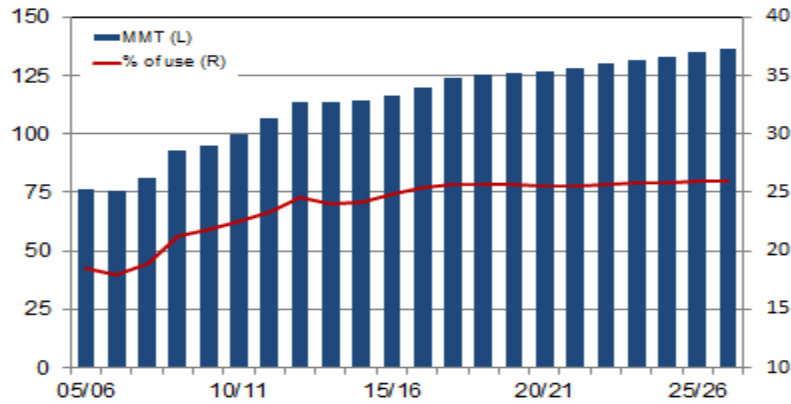
Most Rice Consumers Are Near Self-Sufficiency

Rice net exports of exporting countries, mmt



Enough Inventories to Absorb Short-Term Shocks

Global Rice ending stocks, mmt



Rice Area Harvested

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
	(Million hectares)										
Argentina	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Australia	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Brazil	3.0	3.0	2.9	2.9	2.8	2.8	2.4	2.4	2.4	2.3	2.0
China	28.8	28.9	28.9	29.2	29.6	29.9	30.1	30.1	30.3	30.3	30.2
EU-28	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4
Indonesia	11.8	11.9	11.9	12.2	12.1	12.1	12.2	12.2	12.1	11.8	12.1
India	43.7	43.8	43.9	45.5	41.9	42.9	44.0	42.8	44.1	44.1	43.5
Japan	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Malaysia	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Mexico	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
South Korea	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8
Thailand	10.2	10.3	10.8	10.8	10.9	10.7	11.0	10.8	10.9	10.3	9.4
United States	1.4	1.1	1.1	1.2	1.3	1.5	1.1	1.1	1.0	1.2	1.0
Rest of world	51.2	51.3	51.5	52.7	53.2	54.4	55.7	55.5	56.8	57.0	57.2
World total	154.2	154.3	155.0	158.5	155.8	158.2	160.4	158.8	161.6	160.9	159.2

Rice Area Harvested

	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
	(Million hectares)										
Argentina	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Australia	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Brazil	2.0	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9
China	30.2	29.8	29.5	29.3	29.2	29.1	29.0	28.9	28.7	28.6	28.4
EU-28	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Indonesia	12.2	12.1	12.1	12.0	12.0	12.0	12.0	12.0	12.0	11.9	11.9
India	44.5	44.8	43.6	43.1	43.1	43.3	43.5	43.7	43.8	43.9	44.0
Japan	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.4	1.4
Malaysia	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
Mexico	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Korea	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Thailand	10.1	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.1	10.1	10.0
United States	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Rest of world	57.4	57.6	58.1	58.0	58.3	58.8	59.1	59.3	59.5	59.7	60.0
World total	161.3	161.6	160.7	159.7	159.8	160.3	160.7	160.7	160.8	160.9	160.9

Rice Trade

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
	(Thousand metric tons)										
Net exporters											
Argentina	477	445	434	548	481	698	588	532	462	307	555
Australia	232	-32	-152	-200	-169	232	324	288	230	153	-20
India	4,682	5,740	4,654	2,090	2,082	2,774	10,376	10,869	10,619	12,238	10,240
Thailand	7,374	9,554	10,003	8,270	8,747	10,447	6,345	6,122	10,669	9,479	9,200
United States	3,116	2,270	2,577	2,422	2,912	2,934	2,585	2,716	2,271	2,278	2,655
Total net exports	15,881	17,977	17,516	13,130	14,053	17,085	20,218	20,527	24,251	24,455	22,630
Net importers											
Brazil	476	490	-128	106	186	-847	-223	-199	-289	-538	200
China	-562	-868	-927	-546	-262	40	1,349	2,809	3,740	4,274	4,529
EU-28	972	1,201	1,427	1,210	1,096	1,153	1,092	1,192	1,288	1,434	1,531
Indonesia	539	2,000	350	240	1,150	3,098	1,960	650	1,225	1,350	1,100
Japan	531	558	436	467	504	611	422	566	599	565	620
Malaysia	751	873	1,036	1,085	906	1,075	1,006	874	952	978	900
Mexico	579	594	572	578	602	710	645	751	696	707	691
South Korea	-4	94	254	253	297	401	377	508	311	463	338
Rest of world	9,490	10,294	13,081	8,190	6,493	8,832	9,160	10,773	11,299	12,775	11,009
Total net imports	12,772	15,236	16,101	11,583	10,972	15,073	15,788	17,924	19,821	22,008	20,918
Residual	3,109	2,741	1,415	1,547	3,081	2,012	4,430	2,603	4,430	2,447	1,712
	(Dollars per metric ton)										
Rice price, FOB Bangkok	301	320	551	609	533	518	590	565	428	420	378

Rice Trade

	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
	(Thousand metric tons)										
Net exporters											
Argentina	536	457	436	427	422	418	414	411	411	414	419
Australia	248	294	302	307	310	310	306	297	288	277	266
India	10,395	10,119	10,671	10,774	10,977	11,353	11,839	12,346	12,827	13,282	13,728
Thailand	9,479	8,637	8,699	8,914	9,089	9,211	9,273	9,352	9,410	9,460	9,531
United States	2,776	2,970	3,074	2,994	2,987	3,059	3,149	3,192	3,251	3,299	3,357
Total net exports	23,433	22,477	23,182	23,415	23,786	24,351	24,980	25,599	26,187	26,732	27,301
Net importers											
Brazil	42	189	178	284	214	138	104	105	68	39	13
China	4,672	3,656	3,643	3,638	3,640	3,649	3,663	3,662	3,662	3,659	3,648
EU-28	1,581	1,513	1,593	1,604	1,599	1,594	1,589	1,571	1,555	1,540	1,518
Indonesia	1,078	597	1,065	1,299	1,508	1,727	1,938	2,116	2,273	2,403	2,497
Japan	617	611	607	607	607	607	607	607	607	607	607
Malaysia	905	955	999	1,034	1,079	1,115	1,151	1,184	1,217	1,248	1,277
Mexico	750	765	791	799	808	811	814	816	820	825	830
South Korea	409	409	409	409	409	409	409	409	410	414	418
Rest of world	11,069	11,471	11,586	11,430	11,611	11,991	12,395	12,819	13,265	13,685	14,181
Total net imports	21,122	20,166	20,871	21,104	21,475	22,040	22,669	23,288	23,876	24,421	24,990
Residual	2,311	2,311	2,311	2,311	2,311	2,311	2,311	2,311	2,311	2,311	2,311
	(Dollars per metric ton)										
Rice price, FOB Bangkok	390	393	377	394	401	402	395	396	394	392	394