CHILE: recent trends in agricultural production and trade
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May 1964
Chile's domestic agricultural production in recent years has not kept pace with demand, resulting in a need for expanded agricultural imports. Increased consumer purchasing power along with population growth has brought about a greater demand for agricultural products. Chile's economic growth since World War II has been strongly oriented toward mining and industry.

During recent years unstable prices for copper have affected exports. Gold and foreign exchange reserves fell in 1961 and Chile placed severe restrictions on imports. Total imports were reduced sharply in 1962 from the previous year, while agricultural imports were cut slightly. Agricultural imports, however, were still much greater than agricultural exports.

Chile has devised an ambitious plan for economic development, but low levels of technology and the need for agrarian reform remain as serious obstacles to agricultural progress.

U. S. agricultural exports to Chile averaged $23 million per year between 1959 and 1962. The outlook over the next few years appears good for continuing exports of U. S. wheat, dairy products, cotton, vegetable oils, tobacco, and rice at fairly high levels.
INTRODUCTION

Lagging agricultural production has contributed to Chile's low economic growth rate, inadequate foreign exchange reserves, and inflation. Inability to increase exports has led to restrictions on imports. This has curtailed the availability of capital goods, thereby retarding economic development and intensifying inflationary pressures.

Chile's gross national product (GNP) grew at a rate of about 3.3 percent per year from 1958 through 1962 (measured in 1961 prices). On a per capita basis, however, GNP grew only 1 percent per year. Agricultural output has not done as well as other sectors of the economy (table 1). The value of agricultural imports has increased to a level about three times that of agricultural exports.

Since 1958 trade balances have been mostly unfavorable. In 1961 total imports reached $585 million against exports of only $506 million. Gold and foreign exchange reserves fell from a high of $131 million in 1959 to $74 million in 1961. As a countermeasure the Government applied strict import controls in 1962.

Many of Chile's economic difficulties are fiscal in origin. Government deficits have been heavy since 1957. Despite inflation and severe pressures to depreciate, exchange rates were held stationary from 1959 until October 1962. Speculative capital outflows have also contributed to the country's fiscal difficulties. While the cost of living rose at a yearly average of about 19 percent between 1956 and 1962, wages increased at an even faster rate (table 2). Thus, the purchasing power of the wage earner increased at the same time that per capita agricultural production lagged.

Technological improvement in Chilean agriculture is to a large extent dependent upon improved educational opportunities for rural people. Although the rate of illiteracy for those over 10 years of age in the whole country is less than 20 percent, in the rural zones the rate is about 40 percent. Educational facilities in the rural zones are limited. Chile's agricultural extension service is still limited in scope. Agricultural research has made progress but needs to be improved. An additional restricting factor is that low interest credit for technological improvements cannot be readily found by most farmers.

Extremes in farm sizes and inadequacies in land tenure arrangements indicate the need for basic agrarian reform. Tax laws and administrative procedures tend to favor the large unit. Real estate taxes amount to only about 2 percent of assessed valuations.

AGRICULTURAL PRODUCTION AND DEMAND TRENDS

Agricultural Characteristics

Chile is slightly larger than Texas. About 38 percent of the country's 286,396 square miles of land area is classed as farmland. The 1955 census showed that some 8 percent of the land in
<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GNP 1/ (million U.S. dollars)</td>
<td>3,212</td>
<td>3,270</td>
<td>3,352</td>
<td>3,506</td>
<td>3,650</td>
</tr>
<tr>
<td>Per capita GNP 1/ (U.S. dollars)</td>
<td>444</td>
<td>441</td>
<td>442</td>
<td>452</td>
<td>459</td>
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<tr>
<td>Production indexes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture (1952-54 = 100)</td>
<td>122</td>
<td>119</td>
<td>122</td>
<td>118</td>
<td>124</td>
</tr>
<tr>
<td>Mining (1953 = 100)</td>
<td>119</td>
<td>133</td>
<td>127</td>
<td>136</td>
<td>143</td>
</tr>
<tr>
<td>Industrial (1953 = 100)</td>
<td>112</td>
<td>128</td>
<td>126</td>
<td>133</td>
<td>147</td>
</tr>
<tr>
<td>Population (thousands)</td>
<td>7,241</td>
<td>7,411</td>
<td>7,585</td>
<td>7,762</td>
<td>7,944</td>
</tr>
</tbody>
</table>

1/ Gross national product at 1961 prices.

Sources: U.S. Department of Agriculture; Agency for International Development; and Chilean Government reports.

---

Table 2.--Chile: Indexes of cost of living, wages, and per capita agricultural production, 1956-62

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of living (1958 = 100)</th>
<th>Wages 1/ (1958 = 100)</th>
<th>Per capita agricultural production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>63</td>
<td>50</td>
<td>91</td>
</tr>
<tr>
<td>1957</td>
<td>79</td>
<td>83</td>
<td>99</td>
</tr>
<tr>
<td>1958</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1959</td>
<td>139</td>
<td>141</td>
<td>94</td>
</tr>
<tr>
<td>1960</td>
<td>155</td>
<td>160</td>
<td>94</td>
</tr>
<tr>
<td>1961</td>
<td>167</td>
<td>186</td>
<td>90</td>
</tr>
<tr>
<td>1962</td>
<td>190</td>
<td>2/234</td>
<td>93</td>
</tr>
</tbody>
</table>

1/ Agricultural and nonagricultural wages. 2/ Preliminary.

farms was either in crops or fallow. Recent studies indicate that farmland could be increased about 10 percent. But the greatest potential for increased agricultural output lies in better utilization of the present farmland.

Although some expansion in crop acreage has taken place at the expense of pasture and fallow land in recent years, certain economic factors have worked against this by favoring livestock production. Farm prices for livestock products rose more rapidly than prices for other agricultural products during the period 1952-61. Wages paid to farm workers increased more than those paid to nonfarm workers. Through 1960 Chilean farmers increased beef production with its relatively low labor requirements faster than crop production. Inflation has encouraged dairy production with its ready market and comparatively rapid investment return. However, since 1960 livestock production has leveled off while crop acreages have continued to increase.

According to the 1955 agricultural census, a total of 2.01 million hectares (1 hectare = 2.471 acres) of land was under cultivation. Most of the farmland was made up of extremely large units. Farms of over 1,000 hectares constituted less than 3 percent of all Chilean farms in 1955 but encompassed 80 percent of the total farmland including, however, considerable marginal land. On the other hand, farms under 20 hectares accounted for 65 percent of all farms but only 2 percent of the total farm area. Many small farmers as well as workers on the large farms cultivate small plots to provide their own food needs under various tenure arrangements.

Poor crop rotation, lack of fertilizer and improved seeds, soil erosion, inadequate mechanization, and other factors combine to restrict production. The productivity of the average farm worker is limited because of lack of education, training, and capital.

Most of the productive land of Chile is located in the Central Valley, which extends south some 500 miles from the capital city of Santiago. Farms in this region vary greatly both in size and productivity. In the northern Central Valley, which has a climate similar to the Central Valley of California, only part of the area is under irrigation, even though rainfall is inadequate. Most of the 1.36 million hectares having irrigation facilities in 1956 were not fully irrigated due to chronic water shortages. Despite its water problems, the northern part of the Central Valley supports a fairly diversified agriculture including grains, pulses, oilseeds, fruits, vegetables, and livestock. In the more temperate southern part of the Central Valley wheat and cattle predominate, but potatoes, sugar beets, oats, and deciduous fruits are also raised. The plains of southern Chile are mainly devoted to sheep raising. The extreme northern section of Chile is a desert with only limited farming areas.

Production Incentives and Controls

Through a combination of incentive and control programs, Chile has attempted to expand agricultural production and, at the same time, hold down consumer prices.

In an attempt to reach self-sufficiency in wheat production, the Government has applied a policy of purchasing domestic output to maintain guaranteed producer prices at incentive levels. For example, the guaranteed price for the 1963 wheat crop was the equivalent of $1.84 per bushel or about the same as for imported wheat. This policy has been only partially successful in obtaining desired increases; Chile is only about 85 percent self-sufficient in wheat production.

Producer prices are supported through purchase and storage operations of the Government agency, Empresa de Comercio Agrícola (ECA). The ECA also imports all wheat. In addition, the
ECA purchases for export rice, oats, pulses, potatoes, and dried peaches as well as several nonagricultural commodities. A number of private trading monopolies make advance contracts with farmers to purchase such commodities as sugar beets, sunflower seed, and leaf tobacco.

The Government makes rebates to Chilean farmers for part of the purchase price of fertilizers used in the production of wheat, other grains, sunflower seed, rapeseed, potatoes, and pulses; in 1962 fertilizer rebates were equivalent to $9 million. Producers of wheat, potatoes, and livestock are given a rebate amounting to one-half of the costs of rail transportation from the farm to the market. Sizeable rebates are also given on purchases of improved seeds.

Government-controlled wholesale and retail ceiling prices are in effect on wheat flour, bread, rice, oilseeds, edible oils, sugar, and fresh milk. Prices on several other products have been frozen at levels prevailing in February 1964. Controlled prices have been allowed to rise somewhat with inflation; prices of uncontrolled food and other agricultural products have generally been rising.

Production Trends

Total domestic farm production grew faster than population until 1958. Since that time, agricultural production has fallen behind, the overall growth rate for the decade becoming about the same as the population rate.

Grain production has increased gradually in the last 14 years (table 3). Wheat production has also increased, but it has failed to meet self-sufficiency. Rice output has fluctuated with some overall increase. Feed grains have made rapid gains from a low base in response to higher market prices, reflecting greater demand.

The output of potatoes has made significant gains but has tended to level off in recent years. Pulse production has increased gradually and has maintained an export surplus. Overall production of oilseeds has not changed significantly but rapeseed production has been surpassing that of sunflower seed. Sugarbeet output is expanding rapidly as a result of current technological improvements, but this expansion is still far short of supplying domestic needs. Tobacco output, on the other hand, has increased moderately—about in line with domestic demand.

Livestock production leveled off after 1960, following a period of rapid expansion. Milk and beef output showed particularly rapid gains through 1960. Drought, foot-and-mouth disease, production cycles, and other factors have limited further beef and milk increases. Recently, milk prices have been held below incentive levels.

The Growth of Demand

Since World War II, Chile’s economy has been characterized by the growing importance of industrial and mineral production and the decreasing relative importance of farm production. Agricultural production now accounts for only 13 percent of the national income, compared with 18 percent in 1940.

About 65 percent of the estimated midyear 1962 total population of 7.9 million resides in urban areas, compared with only 53 percent in 1940. Total population has been growing at an estimated rate of 2.3 percent annually. These developments, along with increased purchasing
Table 3.--Chile: Production of principal agricultural products, 1950-63 1/

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>938</td>
<td>1,089</td>
<td>1,105</td>
<td>1,124</td>
<td>1,071</td>
<td>1,268</td>
</tr>
<tr>
<td>Oats</td>
<td>87</td>
<td>111</td>
<td>114</td>
<td>132</td>
<td>110</td>
<td>130</td>
</tr>
<tr>
<td>Corn</td>
<td>77</td>
<td>120</td>
<td>146</td>
<td>145</td>
<td>159</td>
<td>153</td>
</tr>
<tr>
<td>Barley</td>
<td>69</td>
<td>99</td>
<td>128</td>
<td>102</td>
<td>113</td>
<td>117</td>
</tr>
<tr>
<td>Rice, rough</td>
<td>77</td>
<td>80</td>
<td>111</td>
<td>109</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>Potatoes</td>
<td>494</td>
<td>704</td>
<td>614</td>
<td>717</td>
<td>726</td>
<td>750</td>
</tr>
<tr>
<td>Dried beans</td>
<td>72</td>
<td>81</td>
<td>87</td>
<td>86</td>
<td>92</td>
<td>88</td>
</tr>
<tr>
<td>Lentils</td>
<td>13</td>
<td>14</td>
<td>19</td>
<td>17</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Sunflower seed</td>
<td>67</td>
<td>55</td>
<td>50</td>
<td>33</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>2/</td>
<td>9</td>
<td>34</td>
<td>39</td>
<td>29</td>
<td>40</td>
</tr>
<tr>
<td>Flaxseed</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Sugar, centrifugal</td>
<td>2</td>
<td>36</td>
<td>54</td>
<td>76</td>
<td>66</td>
<td>73</td>
</tr>
<tr>
<td>Tobacco</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Milk</td>
<td>660</td>
<td>826</td>
<td>970</td>
<td>922</td>
<td>906</td>
<td>925</td>
</tr>
<tr>
<td>Beef</td>
<td>99</td>
<td>128</td>
<td>151</td>
<td>150</td>
<td>144</td>
<td>140</td>
</tr>
<tr>
<td>Other meat</td>
<td>61</td>
<td>68</td>
<td>73</td>
<td>75</td>
<td>71</td>
<td>75</td>
</tr>
<tr>
<td>Wool</td>
<td>19</td>
<td>21</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Lard</td>
<td>9</td>
<td>10</td>
<td>14</td>
<td>15</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>

1/ Crop figures are for harvest ending in calendar year shown.
2/ Less than 500 tons.

Sources: U.S. Department of Agriculture and Chilean Government reports.

Power of wage earners, have increased the demand for agricultural products. Total daily per capita food consumption grew from an estimated 2,250 calories during 1935-39 to about 2,665 by 1956-58. Estimates for 1959-61 indicate that this trend has leveled off. However, Chileans are eating more meat, dairy products, fats and oils, sugar, rice, vegetables, and fruit than before World War II.

AGRICULTURAL TRADE TRENDS

The Trade Problem

Unstable prices for the major exports, particularly copper, coupled with mounting imports, have reduced Chile's gold and foreign exchange holdings since 1959. January 1964 holdings stood at a low of $63.2 million against a high of $131 million in December 1959.
The lag in agricultural production has retarded the growth of agricultural exports and has increased agricultural imports (table 4). Chile was a net exporter of agricultural products before World War II. Since that time, however, the country has found it necessary to import larger and larger amounts of agricultural products, until in 1962 agricultural imports exceeded agricultural exports by $74 million.

Table 4.--Chile: Export-import trade, and other foreign trade data, 1950-62

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
<th>Imports</th>
<th>Balance of trade</th>
<th>Gold and foreign exchange reserves 1/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Agricultural</td>
<td>Total</td>
<td>Agricultural</td>
</tr>
<tr>
<td>Average:</td>
<td>- - - - - - - -</td>
<td>- Million U.S. dollars</td>
<td>- - - - - - - -</td>
<td></td>
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<tr>
<td>1950-54</td>
<td>383</td>
<td>39</td>
<td>325</td>
<td>75</td>
</tr>
<tr>
<td>1955</td>
<td>472</td>
<td>39</td>
<td>372</td>
<td>100</td>
</tr>
<tr>
<td>1956</td>
<td>542</td>
<td>37</td>
<td>353</td>
<td>99</td>
</tr>
<tr>
<td>1957</td>
<td>455</td>
<td>34</td>
<td>441</td>
<td>91</td>
</tr>
<tr>
<td>1958</td>
<td>386</td>
<td>35</td>
<td>415</td>
<td>90</td>
</tr>
<tr>
<td>1959</td>
<td>495</td>
<td>37</td>
<td>413</td>
<td>108</td>
</tr>
<tr>
<td>1960</td>
<td>488</td>
<td>36</td>
<td>500</td>
<td>115</td>
</tr>
<tr>
<td>1961</td>
<td>506</td>
<td>37</td>
<td>585</td>
<td>122</td>
</tr>
<tr>
<td>1962</td>
<td>532</td>
<td>43</td>
<td>518</td>
<td>117</td>
</tr>
</tbody>
</table>

1/ Reserves are for end of year shown.


To counter the large trade deficit in 1961, the Government established a prohibited import list and raised prior import deposits and "additional" import taxes to the point where they became prohibitive on some commodities. Total imports were decreased from $585 million in 1961 to $518 million in 1962.

Chilean imports are subject to traditional tariff rates consisting of specific import duties and surcharges and other controls (table 5). Items imported into areas designated as free-trade zones in northern and southern Chile are either exempt or carry lower rates. Concessions are given to member countries of the Latin American Free Trade Area (LAFTA) and the General Agreement on Tariffs and Trade (GATT). Some essential agricultural products are imported through Government monopoly purchasing or by special bilateral arrangements.

Chilean exports receive refunds on export taxes and other charges ranging up to 8 percent of the f.o.b. value of many agricultural products; items receiving relatively high refunds include malt, peas, oil seed meal, honey, chickpeas, sheep skins, dried peaches, garlic, and onions. Export controls apply to items in short supply; prohibited commodities include wheat and flour, beans, corn and cornmeal, and cattle hides. Export quotas are maintained on sheep skins, animal hair, lamb, mutton, and onions.

Trade Composition

Copper usually accounts for about two-thirds of Chile's exports, although fluctuating prices and world demand cause considerable variation. Iron ore now accounts for about 11 percent of exports, and nitrates about 6 percent. Agricultural exports average about 8 percent of the total.
## Table 5.—Chile: Current import restrictions

<table>
<thead>
<tr>
<th>Type of import restriction</th>
<th>Rate extremes</th>
<th>Basis of assessment</th>
<th>Exemptions and other special treatment 1/</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific duties</td>
<td>$.02 to $4.40 per lb.</td>
<td>Dutiable value in gold pesos (1 gold peso per $0.206)</td>
<td>Specified products and free-trade zones exempt; reductions for bilateral agreement commodities.</td>
<td>Wheat, unrefined edible oils, and raw sugar are duty free. wheat flour, cotton, hops, seeds, butter, and cheese have low rates.</td>
</tr>
<tr>
<td>Surcharges</td>
<td>3 to 62 percent</td>
<td>Ad valorem on dutiable value</td>
<td>Luxury imports under GATT 50 percent, LAFTA commodities and free-trade zones exempt.</td>
<td>Essential items like raw sugar have 3 percent, general merchandise 30 percent, and luxury items 62 percent.</td>
</tr>
<tr>
<td>Additional taxes</td>
<td>0.1 to 200 percent</td>
<td>CIF value</td>
<td>0-25 percent in free-trade zones, LAFTA commodities reduced.</td>
<td>Wool, wheat, powdered milk, tobacco, raw cotton, seeds, hops, lard, tallow, and butter have low rates. Breeding animals and condensed milk have 50 percent.</td>
</tr>
<tr>
<td>Prior deposits</td>
<td>5 to 10,000 percent</td>
<td>CIF value, returned after 120 days</td>
<td>Specified products, free-trade zones, and LAFTA commodities exempt.</td>
<td>Rice, live hogs, mohair, angora wool, plants, and seeds have high rates. Powdered milk, raw tobacco, wheat, cattle for slaughter, potatoes, eggs, and hides have low rates.</td>
</tr>
<tr>
<td>Prohibited items</td>
<td>—</td>
<td>—</td>
<td>Free-trade zones and LAFTA commodities exempt.</td>
<td>Pulses, concentrated feeds, frozen poultry, refined vegetable oils, canned meat, refined sugar, and fertilizers are prohibited.</td>
</tr>
</tbody>
</table>

1/ All Government monopoly imports are exempt from import restrictions.

Source: U.S. Department of Agriculture.
Pulses, primarily beans and lentils, and wool are the major farm exports; in some years, however, oats and rice have been major exports (table 6). The rice crop is highly dependent upon variable supplies of irrigation water and an export surplus is produced only when water is abundant. Fruits and vegetables, especially onions, canned foods, and hides and skins, are other agricultural exports of some importance.

Chile has shipped limited amounts of rice, beans, garlic, and fishmeal to Communist countries in return for Cuban sugar and Polish butter. Chile and Peru have a bilateral trade agreement whereby tariff concessions are given on Chilean exports of oats, fruits and nuts, processed vegetables, and malt.

Nonagricultural imports--principally machinery, vehicles and equipment, industrial chemicals, and crude petroleum--predominate, with agricultural products accounting for about 23 percent of all imports in recent years. Although Chile imports a wide variety of agricultural products (table 6), four main commodities--live cattle, wheat and flour, sugar, and cotton--account for well over two-thirds of the value of agricultural imports. Live cattle imports have moved consistently upward in recent years, in response to higher demand and prices. Wheat and flour imports have been at a high level in recent years as domestic production has lagged. Most of Chile's sugar requirement is imported. All of Chile's cotton is also imported since cotton is not grown commercially. Other imported agricultural commodities include beverages, fats and oils, meat, milk products, tobacco, and rice. In 1962, imports of beef and veal and tallow increased considerably.

Trade with the United States

Chile's major source of imports is usually the United States, followed by Western Europe and other Latin American countries. In 1962, about one-half of the value of all imports from the United States consisted of machinery and vehicles and about 16 percent consisted of agricultural commodities. The United States imports a number of Chilean products. Copper is by far the most important one, accounting in 1962 for 72 percent of the value of all U.S. imports from Chile.

Chile has provided an increasing outlet for U.S. agricultural products. The United States shipped $10.5 million worth in 1959, $21.8 million in 1960, $34.3 million in 1961, and $27.0 million in 1962 (table 7). About 60 percent of these shipments moved under Public Law 480 (the U.S. Trade Development and Assistance Act of 1954 as amended).

The principal U.S. farm exports during 1961 and 1962 were wheat and flour, valued at $13.9 million in 1962, or slightly more than one-half of the value of U.S. agricultural exports to Chile. As Chile sought special trade arrangements under P.L. 480 to counter a lack of foreign exchange, U.S. wheat and flour exports to Chile rose from $2.8 million in 1959 to $4.5 million in 1960 and to $14.7 million in 1961. At the same time, Argentina, the usual competitor, had poor wheat crops and smaller exportable surpluses.

Under special P.L. 480 arrangements, soybean oil has been another growing U.S. agricultural export to Chile. Shipments of it were valued at $1.4 million in 1959, $1.0 million in 1960, $4.0 million in 1961, and $5.1 million in 1962.

Other U.S. agricultural exports to Chile in 1962 were: tobacco, $2.1 million; dairy products (mostly charity and public donations), $1.7 million; and rice, $1.1 million. Cotton exports to Chile, which were negligible in 1962, averaged about $6 million during the previous 3 years.
Table 6.--Chile: Foreign trade in principal agricultural products, 1958-62

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>- - - - - - - - - 1,000 metric tons - - - - - - -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Imports:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live cattle 2/</td>
<td>57.4</td>
<td>170.9</td>
<td>165.6</td>
<td>150.0</td>
</tr>
<tr>
<td>Beef and veal</td>
<td>.1</td>
<td>.2</td>
<td>.2</td>
<td>8.6</td>
</tr>
<tr>
<td>Milk, powdered</td>
<td>14.3</td>
<td>3.9</td>
<td>7.7</td>
<td>12.5</td>
</tr>
<tr>
<td>Hides and skins</td>
<td>2.2</td>
<td>5.5</td>
<td>5.2</td>
<td>3/</td>
</tr>
<tr>
<td>Lard</td>
<td>6.3</td>
<td>7.8</td>
<td>8.2</td>
<td>6.6</td>
</tr>
<tr>
<td>Tallow</td>
<td>2.3</td>
<td>2.8</td>
<td>3.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Wheat and flour</td>
<td>67.7</td>
<td>166.4</td>
<td>239.2</td>
<td>198.7</td>
</tr>
<tr>
<td>Rice, milled</td>
<td>2.9</td>
<td>21.5</td>
<td>11.7</td>
<td>8.4</td>
</tr>
<tr>
<td>Edible vegetable oils</td>
<td>20.0</td>
<td>8.9</td>
<td>16.0</td>
<td>19.0</td>
</tr>
<tr>
<td>Sugar</td>
<td>57.4</td>
<td>112.2</td>
<td>328.0</td>
<td>173.5</td>
</tr>
<tr>
<td>Coffee</td>
<td>3.7</td>
<td>9.3</td>
<td>4.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Tea</td>
<td>8.7</td>
<td>5.8</td>
<td>5.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Yerba mate</td>
<td>10.8</td>
<td>9.8</td>
<td>8.9</td>
<td>10.1</td>
</tr>
<tr>
<td>Cotton</td>
<td>13.0</td>
<td>33.4</td>
<td>21.2</td>
<td>25.0</td>
</tr>
<tr>
<td>Tobacco</td>
<td>.4</td>
<td>.7</td>
<td>.8</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Exports:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horses 4/</td>
<td>1.2</td>
<td>1.3</td>
<td>1.0</td>
<td>3/</td>
</tr>
<tr>
<td>Meat and products</td>
<td>3.0</td>
<td>1.5</td>
<td>3.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Sheep's wool</td>
<td>6.7</td>
<td>6.0</td>
<td>9.6</td>
<td>5.9</td>
</tr>
<tr>
<td>Alpaca and llama wool</td>
<td>.1</td>
<td>5/</td>
<td>.1</td>
<td>3/</td>
</tr>
<tr>
<td>Hides and skins</td>
<td>1.0</td>
<td>1.0</td>
<td>1.7</td>
<td>3/</td>
</tr>
<tr>
<td>Oats, including processed</td>
<td>13.4</td>
<td>2.2</td>
<td>---</td>
<td>.5</td>
</tr>
<tr>
<td>Barley</td>
<td>4.3</td>
<td>3.0</td>
<td>---</td>
<td>3.9</td>
</tr>
<tr>
<td>Rice, rough</td>
<td>---</td>
<td>.2</td>
<td>9.5</td>
<td>36.7</td>
</tr>
<tr>
<td>Beans</td>
<td>17.6</td>
<td>22.2</td>
<td>26.2</td>
<td>19.0</td>
</tr>
<tr>
<td>Chickpeas</td>
<td>1.8</td>
<td>1.1</td>
<td>.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Lentils</td>
<td>15.2</td>
<td>14.5</td>
<td>15.2</td>
<td>9.9</td>
</tr>
<tr>
<td>Onions and garlic</td>
<td>32.5</td>
<td>40.0</td>
<td>27.6</td>
<td>31.5</td>
</tr>
<tr>
<td>Melons</td>
<td>6.8</td>
<td>9.5</td>
<td>8.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Grapes</td>
<td>5.2</td>
<td>6.0</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Apples</td>
<td>9.7</td>
<td>11.8</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Peaches</td>
<td>1.2</td>
<td>1.6</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Plums</td>
<td>1.2</td>
<td>.9</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Prunes</td>
<td>2.6</td>
<td>3.0</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Lemons</td>
<td>2.4</td>
<td>2.7</td>
<td>3.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Fruit juice</td>
<td>1.5</td>
<td>2.4</td>
<td>2.2</td>
<td>3/</td>
</tr>
<tr>
<td>Nuts</td>
<td>1.2</td>
<td>1.2</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Malt</td>
<td>10.0</td>
<td>6.4</td>
<td>1.0</td>
<td>3/</td>
</tr>
<tr>
<td>Honey and beeswax</td>
<td>2.5</td>
<td>3.3</td>
<td>2.6</td>
<td>3.4</td>
</tr>
</tbody>
</table>

1/ Preliminary.
2/ 1,000 head.
3/ Not available.
4/ 100 head.
5/ Less than 500 metric tons.

Table 7.--U.S. agricultural exports to Chile, 1959-62

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat and flour.....</td>
<td>2.6</td>
<td>4.5</td>
<td>14.7</td>
<td>13.9</td>
</tr>
<tr>
<td>Soybean oil..........</td>
<td>1.4</td>
<td>1.0</td>
<td>4.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Tobacco..............</td>
<td>.3</td>
<td>.8</td>
<td>1.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Dairy products......</td>
<td>2.5</td>
<td>1.4</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Rice................</td>
<td>.6</td>
<td>2.0</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Cotton...............</td>
<td>1.2</td>
<td>9.6</td>
<td>6.0</td>
<td>.1</td>
</tr>
<tr>
<td>Other...............</td>
<td>1.9</td>
<td>2.5</td>
<td>5.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Total................</td>
<td>10.5</td>
<td>21.8</td>
<td>34.3</td>
<td>27.0</td>
</tr>
</tbody>
</table>

Source: Foreign Agricultural Trade of the United States, U.S. Department of Agriculture.

Fruits, mostly grapes, are the major U.S. agricultural imports from Chile, and such imports in 1962 were valued at $3.2 million. Vegetable imports by the United States in 1962 were valued at $0.7 million, animal products at $1.8 million, and other agricultural imports at $0.8 million.

CURRENT DEVELOPMENT AND REFORM PLANS

Under the Alliance for Progress, Chile has formulated a 10-year National Program of Economic Development, 1961-70 (table 8). The plan projects an annual growth rate of 5.5 percent in gross national product, with a yearly increase of 5.5 percent in agriculture, 6.0 percent in mining, and 6.5 percent in manufacturing.

Table 8.--Chile: Selected goals under the 10-year National Program of Economic Development (1961-70)

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit 1/</th>
<th>1961</th>
<th>Goal for 1970</th>
<th>Growth (1961-70)</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Agricultural production....</td>
<td>Million escudos 2/</td>
<td>594</td>
<td>962</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Mining production...........</td>
<td>Million escudos 2/</td>
<td>249</td>
<td>421</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Industrial production......</td>
<td>Million escudos 2/</td>
<td>1,340</td>
<td>2,361</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>Exports.....................</td>
<td>Million dollars</td>
<td>506</td>
<td>896</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Imports.....................</td>
<td>Million dollars</td>
<td>385</td>
<td>848</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Irrigated land.............</td>
<td>Thousand hectares</td>
<td>1,400</td>
<td>3/ 1,775</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Unirrigated (arable) land..</td>
<td>Thousand hectares</td>
<td>5,450</td>
<td>5,600</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Orchards...................</td>
<td>Thousand hectares</td>
<td>60</td>
<td>103</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Tractors...................</td>
<td>Numbers</td>
<td>18,000</td>
<td>4/ 38,600</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>Paved roads..............</td>
<td>Miles</td>
<td>1,750</td>
<td>3,450</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

1/ One escudo in 1960 equaled about 1.05 dollars; 1 hectare equals 2.471 acres.
2/ Based on 1960 escudos.
3/ In addition, 500,000 hectares of presently irrigated land are to be improved.
4/ Increase based on imports forecast during period with no allowance for depreciation.

Source: Based on Chile's National Program of Economic Development.
The plan calls for total investments of nearly $10 billion, including some $7.5 billion from internal financing and about $2.25 billion from foreign assistance.

An increase of 45 percent in total imports from 1961 to 1970 is projected in the plan. Exports of $896 million are planned for 1970 -- 77 percent more than the $506 million exported during 1961. The projected rise in export earnings anticipates an increase in copper earnings. However, in 1962 copper producers agreed with the Government to curtail output, and therefore copper earnings, because of weak world market demand. Recent strengthening of the demand for copper may permit increased export income as anticipated in the development plan.

Under the plan, agricultural production is scheduled to increase by 62 percent during 1961-70, and at the same time agricultural exports are expected to expand by 140 percent. The plan calls for agricultural investments of nearly $1 billion, accompanied by significant technological improvements. Scheduled improvements in transportation, marketing, and credit facilities would also benefit agriculture.

The Chilean fishing industry is expanding rapidly. Its output was expected to reach 860,000 metric tons in 1963, principally by the introduction of new fishmeal plants and new fishing fleets. Exports of all fish products in 1962 totaled some 92,000 tons valued at $12.3 million ($7.1 million was fishmeal). It is estimated that 1.5 million tons will be produced annually by 1966 and that foreign exchange earnings may eventually reach $50 million per year.

Land reform legislation, on the books for many years, has not been fully enforced. A strengthened agrarian reform bill signed into law in November 1962 provides the legal base needed for tenure improvement. Under the terms of the law, the Agrarian Reform Corporation buys or expropriates land, studies how it can best be utilized, and makes any necessary improvements. Then the land is divided into family-size units and is sold to eligible applicants on low-interest credit terms. The Agricultural Development Institute provides the new owners with credit and technical assistance. A 21-member Supreme Agricultural Development Council gives overall policy guidance for carrying out the law.

The new program is underway; 1,270 families were settled during 1963. The program is designed to break up large, inefficient estates and also to consolidate small units.

**THE OUTLOOK FOR U.S. AGRICULTURAL EXPORTS TO CHILE**

Since 1958 Chile's demand for agricultural products has been expanding faster than actual production; therefore, the need for agricultural imports has grown. To meet this need in the face of foreign exchange shortages, U.S. agricultural exports to Chile rose, strongly assisted by concessional sales under P.L. 480.

The opportunity to save scarce foreign exchange, together with the possibility of using sales proceeds for economic development, will encourage Chile's continued use of P.L. 480 programs. Consequently, U.S. agricultural exports to Chile under these programs appear likely during the next few years.
Chile's purchases on a cash basis, however, of U. S. agricultural commodities will depend largely on the availability of foreign exchange, and on relative prices between the United States and our major competitors in this market. Foreign exchange reserves strengthened somewhat during 1963, reaching the equivalent of $40.7 million in November. However, reserves fell sharply to $19.6 million in January 1964. Prospects are that balance of payment difficulties will continue and that foreign exchange reserves are unlikely to reach the relatively high levels of 1959 for some time.

Assuming that the P.L. 480 program continues and the United States remains competitive, the United States should continue to supply a large share of Chile's demand for imported wheat which, of course, will fluctuate with the size of the domestic crop. U. S. dairy exports to Chile are largely contingent on P.L. 480 programs. The United States and Peru will continue to compete for Chile's sizeable cotton market. U. S. soybean oil, tobacco, and rice should continue to find a market for several years, and opportunities exist for increases in fruits, vegetables, and other agricultural exports to Chile.

The full impact of Chile's development plans and reforms will not be felt for some time. In agriculture particularly, basic reforms and technological improvements as well as increased investments are needed. Many of these changes must come through the slow process of the development of human resources at all levels. Limitations such as availability of land, climate, and geographic factors will remain as obstacles to Chile's producing a larger proportion of its agricultural needs.