

quantities only of the latter can, however, be procured here. The rock near the town is a diabase, probably an olivine-diabase in which the olivine is almost entirely decomposed.

The land in Zebu belongs for the most part to the Mestizes (half-breeds), and is let out by them to the peasants. The owners of the soil know how to keep the peasants in a state of dependence by usurious loans, and consequently agriculture in this island stands lower than in almost any other part of the Philippine group.

The imported goods, which consist for the most part of cotton stuffs, come from Manila though the Chinese traders there, who purchase from the foreign merchants. Among the importations in 1868 were twenty chests of images.

The tides at Zebu at this season of the year (January) appear to be rather peculiar. It was high water at full and change at midnight. Immediately after high water the tide ebbed 7 feet in about seven hours; it then rose  $3\frac{1}{2}$  feet in six and a half hours, after which it fell about 6 inches in three hours, and then rose 4 feet in eight hours, reaching its culminating point at about the time of the moon's transit. The tidal stream however sets regularly six hours each way, the flood tide coming from the southward; but the ebb or south-going stream, immediately following the moon's superior transit, ran with far greater strength than either of the other tides. Its velocity at its greatest strength at the anchorage off Zebu was two miles per hour. Whilst lying at anchor the ship had to be steered for the six hours during which this strong ebb stream was running; during the remaining eighteen hours this was unnecessary. As a surface stream of two knots cannot be considered out of the way, the sheering of the ship can only be accounted for by supposing the under current to have a much greater rapidity than that on the surface.

Supplies at Zebu are scanty; beef very bad, 10 to 12 cents per lb.; fowls \$3 to  $\$3\frac{1}{2}$  per dozen, ducks \$8 to \$10 per dozen; vegetables and fruit very scarce; fish plentiful and moderate; and eggs  $\$3\frac{1}{2}$  per hundred.

South of the town of Zebu the beacons on the reefs had, at the time of the visit, been all blown down, but the buoys remained in position; the one on the Mactan side of the channel was red and white, the others red. These beacons and buoys are maintained by a tax of from one to two cents per ton levied on ships entering the port.

When St. Nicholas Church tower bears N.  $\frac{1}{4}$  E., which is the mark given for leading through the south channel into Zebu, it is in line with the central apex of a triple peaked hill 10 or 12 miles north of the town.

Zebu had a special interest for the naturalists as being the locality from which the beautiful siliceous Sponge, *Euplectella aspergillum* (Venus' flower basket), had been for many years obtained in considerable abundance. It is called by the natives "Reckaderos," and is dredged for in 100 fathoms in the channel between Bohol and Zebu. The form of dredge used by the natives is a very ingenious and effective one. It is