

DINAMIKA PENDUDUK DAN TEKANANNYA TERHADAP DAYA DUKUNG
LAHAN PERTANIAN
KASUS DI DESA KERTAMUKTI CIAMIS JAWA BARAT

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INTISARI

Penelitian ini berjudul Dinamika Penduduk dan Tekanannya Terhadap Daya Dukung Lahan Pertanian Kasus di Desa Kertamukti Ciamis Jawa Barat. Tujuan penelitian untuk memahami dinamika penduduk sebagai faktor dominan yang berpengaruh terhadap daya dukung lahan pertanian. Selain itu, penelitian ini juga bertujuan mencari formula baku tekanan penduduk, nisbah manusia-lahan layak, dan kapasitas daya dukung lahan pertanian layak bagi sejumlah penduduk petani per satuan hektar.

Untuk memperoleh data penduduk termasuk pertumbuhannya, luas total lahan yang dimiliki penduduk, dilakukan sensus terhadap 842 kepala keluarga yang terdapat di Desa Kertamukti. Untuk memperoleh data tata guna lahan, analisis satuan unit geomorfologi dan pemetaan digunakan foto udara. Data tentang pendapatan per kapita petani dari lahan pertanian per satuan hektar dan masukan teknologi budidaya tani, diperoleh dengan sampel 10 persen dari kepala keluarga petani di atas. Data yang terkumpul diinterpretasi dengan analisis statistik yaitu dengan menggunakan formula tekanan penduduk dan formula daya dukung lahan pertanian.

Hasil penelitian menemukan bahwa dinamika penduduk Desa Kertamukti dan tekanannya terhadap lahan telah melampaui kapasitas daya dukung lahan pertanian. Faktor dominan tekanan penduduk di daerah itu yaitu pertumbuhan penduduk 6,28 persen per tahun selama tiga dasawarsa terakhir hingga 1985, yang tiga perempatnya berasal dari faktor migrasi masuk. Angka-angka berikut memperkuat pernyataan di atas tentang ketidak layakan nisbah manusia-lahan: nisbah manusia-lahan 2,65 lebih tinggi dari angka normal (1,63), per kapita pemilikan lahan 0,238 ha dengan teknologi tradisional lebih rendah dari keadaan normal (0,612 ha per orang), tekanan penduduk 2,5 lebih tinggi dari normal (1), pendapatan per kapita 280 kg beras per tahun jauh lebih rendah dari pendapatan layak (720 kg) dan bahkan lebih rendah dari garis kemiskinan 360 kg, dan kapasitas daya dukung lahan pertanian 1393 dengan teknologi tradisional dan 2396 orang dengan teknologi mutakhir adalah lebih rendah dari



jumlah riil penduduk di daerah itu (3582 orang). Akhirnya penelitian ini menghasilkan beberapa formula baku mengenai: tekanan penduduk terhadap lahan pertanian, luas lahan pertanian layak per orang, kapasitas daya dukung lahan pertanian, estimasi pendapatan per kapita dari lahan pertanian, jumlah luas lahan pertanian tambahan yang diharapkan, dan luas lahan pertanian layak bagi sejumlah penduduk.

THE POPULATION DYNAMICS AND THEIR PRESSURES TO THE
CARRYING CAPACITY OF THE AGRICULTURAL LAND
A CASE IN KERTAMUKTI, CIAMIS, WEST JAVA

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ABSTRACT

The title of this study is The Population Dynamics and Their Pressures To The Carrying Capacity of The Agricultural Land A Case in Kertamukti, Ciamis, West Java. The goal of this study is to understand population dynamics as a dominant factor which influence to the agricultural land's carrying capacity. In addition to that, this study also aimed at looking for a standard formula of population pressure, decent man-agricultural land ratio and that of decent agricultural land's carrying capacity, i.e. the decent number of people per hectare of agricultural land.

In order to get the data of population including its growth, as well as the total size of land owned by all people, a census of 842 family heads was made in Kertamukti. To get the land use data and to make a geomorphologic analysis of this unit including their geomorphological mapping, airphotos were utilized. Then, to get the data about farm family income from each hectare of agricultural land and about the input of agricultural technology, a ten percent sample of the above farm family heads was drawn randomly. The collected data were interpreted by means of statistical analysis i.e. by utilizing formulas of population pressure and that of agricultural land carrying capacity.

The study discovered that population dynamics and its pressure on agricultural land in Kertamukti was beyond its carrying capacity. A growth rate of 6,28 percent a year during three decades prior to 1985, of which three quarters come from immigration, was a dominant factor of population dynamics in the area. The following figures support the above statement about imdecent man-agricultural land ratio: man-land ratio of 2,65 is higher than normal figures (1.63), per capita land ownership of 0.238 hectare under sophisticated agricultural technology is lower than normal standard (0.356 hectare per person), per capita land ownership of 0.238 hectare under traditional technology is lower than normal situation (0.612 hectare per person), popula-



tion pressure of 2.5 is higher than normal (1), per capita income of hulled rice of 280 kg a year is far lower than decent income (720 kg) and even lower than poverty line which is 360 kg, and, carrying capacity of agricultural land under traditional technology of 1393 and under high technology of 2396 are lower than the real number of population in the area (3582 persons). Finally the study suggested standard formulas: population pressure on agricultural land, decent size of agricultural land per person, agricultural land carrying capacity, estimate of the decrease of agricultural land, decent man-land agricultural land ratio, estimate of per capita income from agricultural land, expected additional size of agricultural land, decent size of agricultural land to support a certain number of people.