(U.S.D.A. 1965) and the United Nations (U.N. 1969), we estimated the relationship between AIPH and JPH by

1. Simulating the world model without the job sector to obtain synthetic time-series data on AIPH and IOPC between 1900 and 2010. The resulting data and an extrapolation to IOPC=0 are plotted in Figure 3-30.
2. Converting the relationship between GDP per capita and jobs per hectare (Figure 3-31) to a relationship between jobs per hectare and industrial output per capita using the data provided in column 6 of Figure 3-7. This involves the assumption that the fraction of GDP composed of industrial output in 1960 was about the same as the equivalent fraction in 1968.
3. Employing the relationships obtained in steps 1 and 2 to relate AIPH to JPH. The results for ten countries, summarized in Figure 3-32, were incorporated in the World3 table function JPHT (Figure 3-33).
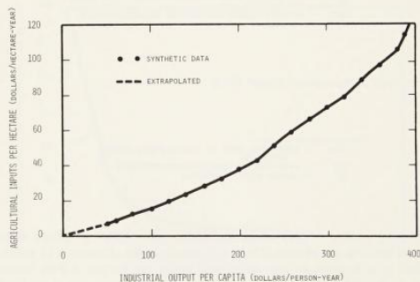

Figure 3-30 Agricultural inputs per hectare versus industrial output per capita (synthetic data from World3)
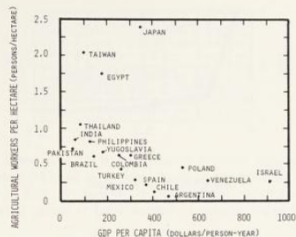
Figure 3-31 Number of agricultural workers per hectare versus gross domestic product for nineteen countries, 1960
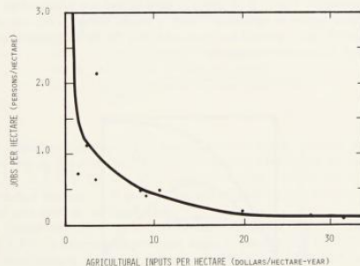Source: U.S.D.A. 1965.

Figure 3-32 Jobs per hectare versus agricultural investment per hectare for ten countries

```
JPH.K=TABHL(JPHT,AIPH.K,2,30,4)                          79, A
JPHT=2/.5/.4/.3/.27/.24/.2/.2                            79.1, T
   JPH   - JOBS PER HECTARE (PERSONS/HECTARE)
   TABHL - A FUNCTION WITH VALUES SPECIFIED BY A TABLE
   JPHT  - JPH TABLE
   AIPH  - AGRICULTURAL INPUTS PER HECTARE (DOLLARS/
           HECTARE-YEAR)
```