

**PRODUCTION SYSTEM DYNAMIC MODELING OF COCOA IN  
PT.PERKEBUNAN NUSANTARA XII (PERSERO) BANJARSARI  
GARDEN**

**Santy Umaye<sup>1)</sup>, Hari Rujito <sup>2)</sup>, R.Abdoel Djamali<sup>3)</sup>.**

**ABSTRACT**

Determination of the location of this research is done intentionally (purposive) that is in PT. Perkebunan Nusantara XII (Persero) Banjarsari Garden. The method used is the method of expert systems, the research carried out using an analytical method for the structure of a problem and a decision on an alternative, by conducting interviews with four experts then the results are modeled using a systems approach with the help of software powersim constructor 2:51 version. The results of this study (a) factors affecting the production of cocoa in PT.Perkebunan Nuantara XII (Persero) Banjarsari Garden among others: land, , the addition of land area,rate of increase of land, the percentage of land that is planted; b) Based on the results of research in the application bahwasannya optimistic scenario, moderate and pessimistic cocoa production in PT. Perkebunan Nusantara XII(Persero) Banjarsari Garden always decrease.

Keywords: cocoa, modeling,dinamic expert systems.

- 1) Students at the Polytechnic of Jember, Department of Agribusiness Management, Program Management Studies D-IV Agroindustri
- 2) Lecturer at the Polytechnic of Jember, Department of Agribusiness Management, Program Management Studies D-IV Agroindustri
- 3) Lecturer at the Polytechnic of Jember, Department of Agribusiness Management, Program Management Studies D-IV Agroindustri