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Interpretative Structural Modeling Institutional Land Use Of Agricultural In Pasuruan

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Abstract
Institutional interaction is dynamic and changes according to institutional caused by changes in the values and culture of society in line with future changes. Farmers become important institutional arrangement, due to rampant land conversion for agriculture into non-agricultural land. This study aims to find clarity decisions agricultural institutions in the form of institutional models in Pasuruan, East Java, Indonesia. Quantitative research methods were used to approach Interpretative Structural Modeling (ISM). The results showed clear decision on the repair and improvement of the land use pattern elements, agricultural institutions, economic capital, human capital, social capital, government policy, institutional change land use, and reduction of constraints on agricultural land use.
Key words: institutional, land use, agricultural, ISM

1. Introduction

Pattern institutional economics can be assessed according to the presence of the community in which they reside. Institutional formally called the (legal) or informal (social norms, traditions, customers), here is the behavior of the economic governance of the agency or individual, involvement of political, social and economic relations (North, 1990).

The economic downturn farmers because aspec costs and benefits such as changes in relative prices in the long run is believed to be able to build a more efficient institutional (Egerston in Yustika, 2006). Besides a decline in power bergaining farmers as an increase in the rate of transformation of labor in the agricultural sector that requires outcame of the interaction between the local farmer groups (local interest group) with policy makers and the government as a (rule inforcers). Involvement of each instrument will strengthen (bargaining power) for managing institutional and outcame of interaction (Swallow and Kamara, 2012).

Institutional is a crucial factor in land use change (Pascual *et al*., 2010), economics (Rodrı'guez *et al*., 2012), ecological change (Vellend *et al*., 2013), and improving food security (Aubrya *et al*., 2012). Institutional policies, both formal and informal on agricultural land use that is not implemented by the rules will have an impact on the lifestyle of the local community (Parker *et al*., 2008), changes in the environment (Nuissl *et al*., 2009), socio-economic communities (Renting *et al*., 2008; Le *et al*., 2010; Murtadlo *et al*., 2013), a decrease in the income of farmers (Rahman *et al*., 2012), the behavior of the farmer (Raymond and Spoehr, 2013), and agricultural productivity (Dorward, 2013).

Institutional land use of agricultural in Pasuruan obstacles on the condition of the people who are no longer interested in farming and the growing number of unemployed. Statistical data in Pasuruan shows that the number of domestic agricultural enterprises in 2003 amounted to 235,561 and 2013 amounted to 183,031, meaning that within 10 years the number of households farms decreased by 22.3% (52,530). Less good condition is exacerbated by the number of unemployed people was 3.08% (35,690) of the total state workforce by activity of 1,157,066 (BPS, 2013). These conditions should immediately be repaired, because the long-term will greatly impact on the socio-economic communities.

Farmers become an important institutional arrangement due to rampant land conversion for agriculture into non-agricultural land, so farmers can obtain sufficient results only staples by 60% (Musyawir, 2011). Depreciation of land irrigated by an average of 500 hectares per year. Shrinkage phenomenon wetland area is high on the northern coast of West to East Pantura including Pasuruan greatest conversion occurs because of the demanding needs of land for development of industry and services as a consequence of the process of structural transformation of the economy towards non-agricultural (Kustiwan, 2007; Ningsih 2009).

Institutional research agricultural land use is expected to find clarity agricultural institutions in the form of institutional models (institutional models) that can be used as a reference in optimizing the use of agricultural land and improving the welfare of farmers as well as improved behavior and outcomes such as economic performance, efficiency and economic growth.

2. Literature review

2.1. Institutonal Economic

The complexity of the institutional community can be interpreted as a regulator of multiple behavioral, family, corporate, government, university, money markets, values, customs and ideologies, the tasks of economic, social and others in organizing and facilitating human activities (Colin, 1999).

Analysis of institutional economics at its core that is seeing the issue of "rules of the game", both at the macro and micro institutional environment institutional agreements (Kherallah and Kirsten, 2002). Institutional arragement can be constructed formally by the state facilitated through the establishment of rules. Law rule of the game, with the formation of a political conspiracy that awakened the interest of the public to minimize fraud in society.

2.2. Social Science and Institutional Economics

Informal rules is a very important part of good institutional relations that are social and economic. Balancing between formal rules and informal institutions to be going well, as a complement to the informal rules that make formal rules to function properly. Formal institutional rules are based on the nature of the social order, belief, culture, norms, and the old institutional order. Instability between formal and informal rules will have an impact on the political instability (North, 1990).

Points to begin the modification theory of institutions is instrumental rationality assumption. Understand fully how the mind processes information as cognitive science has made the individual has a mental model to be able to interpret the world around them. This process is derived from the spread of knowledge, values, and norms of inter-generation varies among different ethnic groups and communities (Nee, 2003).

Employers on economic institutions can affect formally through direct involvement in politics, using entrepreneurial talent to hold the de facto political power and change the effect of formal institutions (Douhan and Henrekson, 2008). Where rural definitions can be based on the concept of administrative, land use, economics, which shows a very large variation in socioeconomic characteristics and community welfare measured (Cromartie and Bucholtz, 2008). Finally, some elements of the legal system was introduced as a natural bridge between the abstract formulation of collective preferences and actual social institutions (Mistral, 2006).

The agricultural sector has an important base on which social capital can be perceived fairness or equality of opportunity by members of the community. Justice is what will give birth to the existence of mutual trust, compliance values, social norms, moral community and social rules and sanctions mutually agreed, as well as his cooperation or collaboration between them for the common good (the common good). The internalization process is different in the context of community (gamenschaft) or public (geselschaft) also differ from generation to generation (Dundin, 2005).

Benchmarks in increasing the income of farmers in land use is maximally supportive legal protection. Approach economic development of institutional will certainly contribute to sustainable growth in the long term. Where politics are positioned as not only as an institution of democracy development through sustainable growth, but it will help protect democratic institutions and the future of rent-seeking temptations, as existing rents. Reduction rent can be done through the operation of a strong economic institutions (Iqbal and You, 2001).

2.3. Transaction Costs in Land Use

Policy options and policy design requires a transaction fee (account of transaction costs) to improve the efficiency and continuity of policy. However transaction costs should be a priority for inclusion in the evaluation of alternative environmental instruments or natural resource policy (McCann *et al*., 2005). Emprical analysis shows inefficiencies can arise from transaction costs (high transaction costs) as costs incurred to seek information, conduct negotiations, make contracts, and enforce them (lawenforcement) in the sugarcane farmers and also in his research found twenty-variable transaction costs, for example interest costs of credit, margin interest, opportunity costs queue milled, cooperative fees, land tax and villages, contracting, and security pieces (Yustika, 2005).

The new institutional economics on agricultural development has emerged from theory company, market, and political history marked by two propositions: 1) the nature business contracts determined by uncertainty and guarantees arising from market conditions and agencies applicable (property rights, conventions, structure authority) and 2) institute growing amended by social action for trend changes in relative prices. advancement the empirical result of new institutional economics studies behavior and priority on measurement transaction costs intra-industry and relate to the vertical integration between companies, but in institutional economics in the early stages empirically analyze tasks and more complex relationship between markets and institutions growing (Hubbard, 1997).

2.4. Relative Prices and Technological Innovation in the Institutional Perspective

A case study in Sri Lanka there are constraints on the preparation substsnsial institutional duty on water supply regulations, tariffs independence and participation of the private sector companies. The practice of decentralization at Bangladesh and Nepal institutional factors are important to include naturally is about providing infrastructure at the local level and reform management institutionally factors are significant late to improve efficiency (Martin, 2007).

Study of institutional aspects of resource management such as land, water, forests, water reservoirs in India in applications require the contribution that describes the construction (development) and techonology (desaminations technologies) as a form of collrective actions and not mixing between institutions and technology. The conceptual framework for the deal to succeed institutions (institutional arragements) is a core step as an effective relationship between agents is important (various agents) such as the government, the user organization, group helper (volountary group), and the individual; wherein the issues of the form of this agreement; a) that are common to the magnitude of institutional conflicts led to the macro-institutional and political system, b) the time, space, and specification institutional approach used for generalization and problem solving (Pal *et al*., 2003).

2.5. Utilization of Land on the Socio-Economic Rural Communities

Belshaw (1965) in Raharjo (2004) that the determinant factors in rural economic system is a family of factors that include the family and profit oriented economy is also a factor one-class land where citizens have a farm system that is on average equal breadth and two- system is not the same class citizens (landlords dealing with tenant farmers/farm workers) are supported patron-client relationshib by applying social mechanisms for helping each others. In a sense they own the land "little more than the others" feel "obligated" to share (result) with others who are in the upland areas with which lowland areas.

Morford (2007) recommends the development of indicators as a tool to monitor the social impact of the assumptions that: 1) there is a relationship between land use planning and land use change; 2) there is a relationship between changes in land use and social change; 3) there is a direct relationship between land use planning and social change. Relevant social indicators developed are changes in population, income levels, poverty levels, and employment statistics, education level, employment distribution in demography, resource-based recreational and non-commercial use of land, other aspects of welfare are undefined.

3. Methodology

This study uses a quantitative method approach Interpretative Structural Modeling (ISM), while the determination of the assessment team of experts to fill in the ISM matrix represented by the department of agriculture, university academics, farmer groups, village government, and farmers.

4. Results and Discussion

4.1. The Pattern of Land Use

Relationship the driver power with dependence on each key elements is shown in Figure 1, the key elements of the land use pattern is to increase the productivity of rice farming (1), stabilizing demand for rice seedlings (2), increase and stabilize the price of rice (3), increasing the income of farmers harvest rice (4), increasing the efficiency of rice agro-industry (5), stabilizing demand rice yields (6), improving the quality of rice yields (8), increasing the rice agro-industry revenue (9), increasing the capitalization support rice farming and agro-industry by financial institutions (10),this suggests that the success of Institutions land use of agricultural in Pasuruan greatly determined by the success of sub-elements 1, 2, 3, 4, 5, 6, 8, 9, and 10, and can be tested thoroughly.

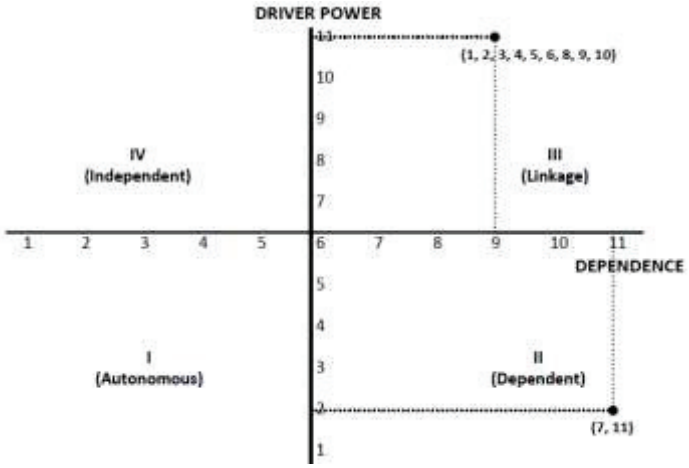

Figure 1. Relationship Driver Power and Dependence

While elements improve and stabilize the price of rice yields (7), and increase the share of the national market Pasuruan city (11) are included in sector II dependence sub-elements 7 and 11 of this variable needs to be improved.

4.2. Institutional Changes Pasuruan Agriculture

The key elements of the institutional changes in land use element is the capacity and the attention of village officials in the utilization of agricultural land (5), this suggests that the success of the Institutions land use of agricultural in Pasuruan greatly determined by the success of the sub (5) elements and can be tested thoroughly. Relationship the driver power with dependence on each key elements is shown in Figure 2.

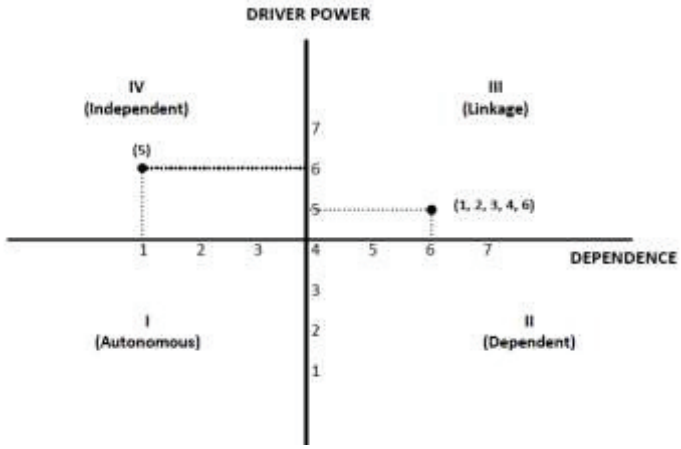

Figure 2. Relationship Driver Power and Dependence

Interaction elements while farmers with relevant parties to address the completion of land quality (1), improved land use planning farm regularly (2), earnings yield of rice mixed with agricultural technology (3), the activities of farmer groups on farm land (4) and non-governmental association of farmers (6) included in the sub-sector linkage III table of elements 1, 2, 3, 4 and 6 of this variable needs to be improved.

4.3.Constraints Land Use Agricultural Pasuruan

The key element is the land use of agricultural in the city of paddy land management Pasuruan unstable (1), the price of rice in the market is not stable (2), farmers are not applying the recommended cultivation technology (3), the cultivation of not applying the recommended cultivation technology (4) , the lack of seed paddy rice productivity and yield high (5), lack of rice farmers in accessing capital in financial institutions (6), lack of agro-industry entrepreneurs rice yields in accessing capital in financial institutions (7), Indonesia only as a price taker the national rice trade (8), agro-industry entrepreneurs and farmers are helpless in pricing (9) and the lack of guidance to farmers and rice cultivation (10), this suggests that the success of the Institutions land use of agricultural in Pasuruan greatly determined by the success of sub-elements 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 and

can be tested thoroughly. Relationship the driver power with dependence on each key elements is shown in Figure 3.

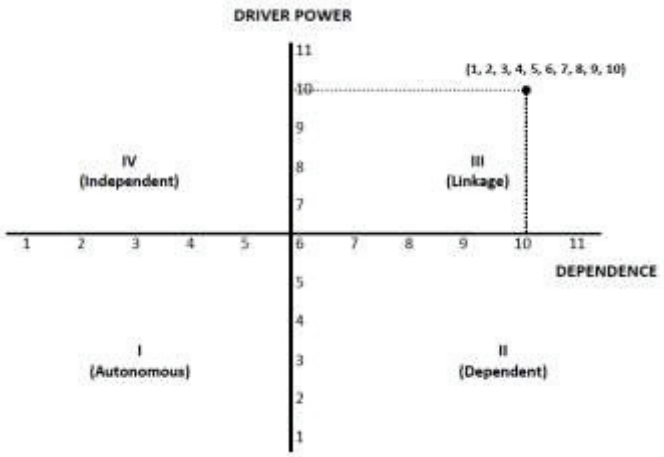

Figure 3. Relationship Driver Power and Dependence

While elements of paddy land management in rural Pasuruan unstable (1), the price of rice in the market is not stable (2), farmers are not applying the recommended cultivation technology (3), the cultivation of not applying the recommended cultivation technology (4), the lack of rice seedlings with productivity and higher rice yield (5), poor rice farmers in accessing capital in financial institutions (6), lack of agro-industry entrepreneurs rice yields in accessing capital in financial institutions (7), Indonesia only as a price taker in the country's rice trade (8), agro-industry entrepreneurs and farmers are not helpless in determining the price (9) and the lack of guidance to farmers and rice cultivation (10) included in the sub-sector linkage III elements 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 of these variables needs to be improved.

4.4. Institutional of Agricultural Pasuruan

The key elements of that element is the body element farmer (1), farmer groups (2), middlemen (agents) (3), agricultural extension (4), village officials (5), NGOs (nongovernmental organizations) (6) , financial institutions (7), higher education institutions (8) and the department of agriculture (9), this suggests that the success of the institutions land use of agricultural in Pasuruan greatly determined by the success of sub-elements 1, 2, 3, 4, 5, 6, 7, 8 and 9 and can be tested thoroughly. Relationship the driver with power dependence on each key elements is shown in Figure 4.

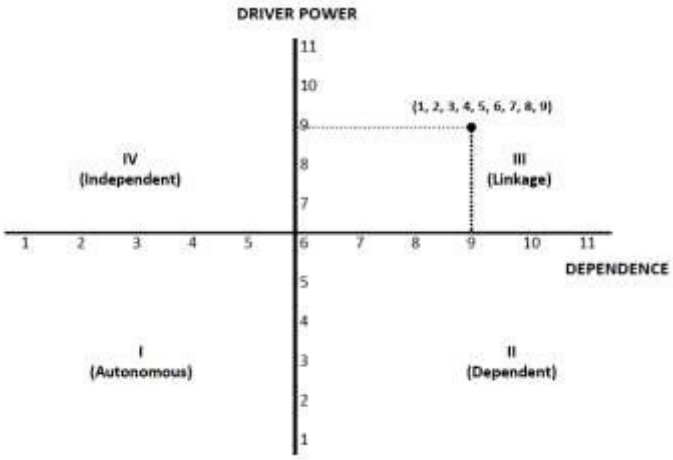

Figure 4. Relationship Driver Power and Dependence

While farmers element (1), farmer groups (2), middlemen (agents) (3), agricultural extension (4), village officials (5), NGOs (nongovernmental organizations) (6), financial institutions (7), higher education institutions (8) and the department of agriculture (9) is included in the third sector sub-element linkage 1, 2, 3, 4, 5, 6, 7, 8, and 9 of this variable needs to be improved.

4.5. Government Policy on Agriculture Land Use

The key element of government policy element is the realization of a sustainable land use rice (1), as well as control over the land in a sustainable rice (2) and empowering farmers to increase their welfare (3), protecting the land rights of farmers in a sustainable manner (4), Establish partnerships with all stakeholders in order to use (5), and the development and protection of sustainable rice land in accordance with the layout (6), this suggests that the success of the Institutions land use of agricultural in Pasuruan determined by the success of the sub-element 1, and 2 and 3, then 4, 5 and 6 and can be tested thoroughly. Relationship the driver with power dependence on each key elements is shown in Figure 5.

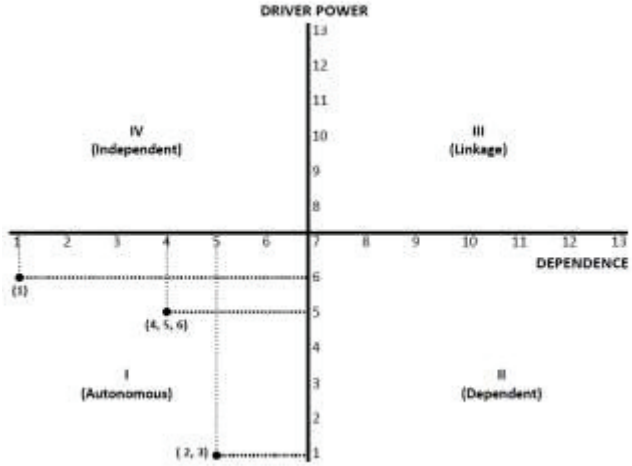

Figure 5. Relationship Driver Power and Dependence

While the land use element of the realization of a sustainable rice (1), as well as control over the land in a sustainable rice (2) and empowering farmers to increase their welfare (3), to protect the land rights of farmers in a sustainable manner (4), Strengthening partnerships with all stakeholders in order to use (5) and the development and protection of sustainable rice land in accordance with the layout (6) included in the sub-sector linkage III elements 1, 2, 3, 4, 5 and 6 of this variable needs to be improved.

4.6. Land Use in the Economic Improvement of Farmers

The key element of the economic capital element is the availability of basic needs of farmers (1), the handling of crop failure (2), the availability of agricultural infrastructure (3), the increase in cropland skills of management (4), meeting the needs of farm families (5) and anticipated crop failure (6), this suggests that the success of the institutions land use of agricultural in Pasuruan determined by the success of sub-elements 1, 2, 3, 4, 5 and 6 and can be tested thoroughly. While elements of the availability of basic needs of farmers (1), the handling of crop failure (2), the availability of agricultural infrastructure (3), the increase of manage expertise clicking cropland (4), meeting the needs of farm families (5) and the anticipated crop failure (6) included in the sub-sector linkage III of elements 1, 2, 3, 4, 5 and 6 of this variable needs to be improved. Relationship the driver with power dependence on each key elements is shown in Figure 6.

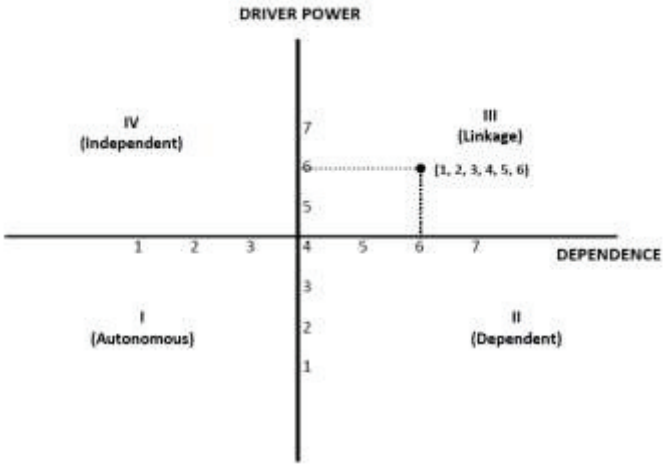

Figure 6. Relationship Driver Power and Dependence

4.7. Land Use in Improving The Quality of Farmers

The key elements of that element is the human capital element extension farm land (1), the absorption of the community in land use (2), the increase in farmers' skills (4), Training managing agricultural land (5), this suggests that the success of Institutions land use of agricultural in Pasuruan greatly determined by the success of sub-elements 1, 2, 4 and 5, and can be tested thoroughly. While the increase in farmers' income element (3) is included in II sub elements of this variable needs to be improved. Relationship the driver with power dependence on each key elements is shown in Figure 7.

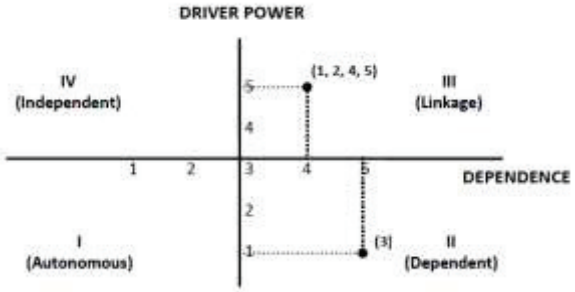

Figure 7. Relationship Driver Power and Dependence

4.8. Socio Economic Sustainability Improvements Farmers

The key element of social capital element is experience farming community (1), reduce the displacement of farmers work (2), handling the job displacement of farmers (3), reducing the dependence of farmers on the other side (4), the formation of social networking sustainability of farmers (5), membership of farmers in farmer groups (6), the number of farmers' organizations (7), the satisfaction of the success of farmers' fields (8), the sensitivity of farmers to farmers' fields (9), the sensitivity of farmers to work together to mobilize land use (10), the involvement of farmers the preservation of agricultural land (11), village officials attention to farmers and cropland (12) and the role of religion in the farmers and the land use (13), this suggests that the success of the Institutions land use of agricultural in Pasuruan greatly determined by the success of sub-elements 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 and can be tested thoroughly. Relationship the driver with power dependence on each key elements is shown in Figure 8.

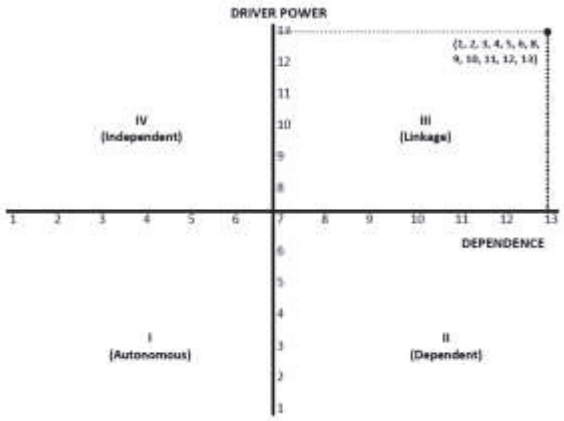

Figure 8. Relationship Driver Power and Dependence

While elements of the farming community experience (1), reducing the job displacement of farmers (2), handling the job displacement of farmers (3), reducing the dependence of farmers on the other side (4), the formation of social networking sustainability of farmers (5), membership of farmers in farmer groups (6), the number of farmers' organizations (7), the satisfaction of the success of farmers' fields (8), the sensitivity of farmers to farmers' fields (9), the sensitivity of farmers to work together to mobilize land use (10), the involvement of farmers in the preservation of agricultural land (11), village officials attention to farmers and cropland (12) and the role of religion in the farmers and the land use (13) included in the sub-sector linkage III 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 , 11, 12 and 13, this variable needs to be improved.

5. Conclusion

Improved stability and yield of rice prices and strengthening Pasuruan city market share in the national land use pattern elements. Increased interaction farmers with relevant parties to address the quality completion of land, improved land use planning farm regularly, revenue rice yields mixed with agricultural technology, farmer group activities on agricultural land use and non-governmental associations of farmers on the land use.

Improved management of paddy fields in the city Pasuruan stable, the price of rice in a stable market, farmers applying recommendation technology cultivation, cultivation of implementing the recommended cultivation technology, the presence of rice seedlings with productivity and higher rice yield, strong rice farmers in accessing capital in financial institutions, strong agro-industry entrepreneurs rice yields in accessing capital in financial institutions, and increased guidance to farmers and rice cultivation on agricultural land use element constraints.

Institutional farmers needs to be improved on is the institutional element is a farmer organizations, farmers, traders, intermediaries (agents), agricultural extension workers, village officials, NGOs (nongovernmental organizations), financial institutions, higher education institutions and the department of agriculture. While elements of government policy needs to be improved is the realization of a sustainable land use rice, as well as control over the function of rice land in a sustainable manner, empowering farmers to increase their welfare, protect the land rights of farmers in a sustainable manner, strengthening partnerships with all stakeholders in order to use land, and the development and protection of sustainable rice land in accordance with the layout.

Economic capital that needs to be improved on the elements of availability of basic needs of farmers, crop failure handling, availability of agricultural infrastructure, skills enhancement, management clicking agricultural land, meeting the needs of family farmers, and the anticipation of crop failure. Increasing farmers' income the human capital element. While in the capital social needs to be improved is the experience of the farmer community, reduce the displacement of the work of farmers, farmers 'handling of job displacement, reducing the dependence of farmers on the other hand, the formation of social networking sustainability of farmers, farmer membership in farmer groups, the number of farmers' organizations, the success of land satisfaction farmers, the sensitivity of farmers to farmers' fields, the sensitivity of farmers to work together to mobilize land use, involvement in the preservation of agricultural land of farmers, village officials attention to farmers and farm land, and the farmers and the role of religion in land use.

Suggestions from this study is the need to do research on the application of institutional models in land use to improve farmers' socioeconomic.

References

Andjarwati, A. (2008), "Kebijakan Pemanfaatan Lahan untuk Kesejahteraan Petani", Direktorat Tata Ruang Dan Pertanahan, BAPPENAS, Jakarta.

Aubrya, C., Ramamonjisoab, J., Dabatc, M.H, Rakotoarisoad, J., Rakotondraibee, J. & Rabeharisoaf, L. (2012), "Urban Agriculture and Land Use in Cities: an Approach with the Multi-Functionality and Sustainability Concepts in the Case of Antananarivo (Madagascar)", *Land Use Policy* **29**(2), 429-439.

BPS. (2013), "Badan Pusat Statistik Kabupaten Pasuruan". Kabupaten Pasuruan.

Colin, B. (1999), "Institutions and Economic Change in Southeast Asia", Enward Elgar, Cheltenham, UK.

Cromartie, J. & Bucholtz, S. (2008), "Defining the "Rural" in Rural America", *Amber Waves* **6**(3), 28-34.

Dorward, A. (2013), "Agricultural Labour Productivity, Food Prices and Sustainable Development Impacts and Indicators", *Food Policy* **39**, 40-50.

Douhan, R. & Henrekson, M. (2008), "Productive and Destructive Entrepreneurship in a Political Economy Framework", Research Institute of Industrial Economics, IFN Working Paper No. 761, Sweden.

Dundin, Z. (2005), "Modal Sosial dalam Pengembangan Budaya Sipil Komunitas Etnik", LIPI Press, Jakarta

Hanafie, R. (2010), "Pengantar Ekonomi Pertanian", Andi, Yogyakarta

Hubbard, M. (1997), "The New Institutional Economics in Agricultural Development: Insights and Challenges", *Journal of Agricultural Economics* **48**(1-3), 239-249.

Iqbal, F. & You, J. (2001), "Political Instotutions, Democracy, and Development", The World Bank, Washington, D.C. USA.

Kherallah, M. & Kirsten, J. F. (2002), "The New Institutional Economics: Applications for Agricultural Policy Research in Developing Countries: New Institutional Economists are the Blue-Collar Guys with a Hearty Appetite for Reality", Oliver Williamson, 2000a, *Agrekon* **41**(2), 110-133.

Kholdun, A. (2007), "Muqoddimah Al-Allamah Ibnu Kholdun", Darul Fikr, Bairut Libanon.

Kustiwan, I. (2007), "Kajian Permasalahan dan Kebijakan Pengendalian Konservasi Lahan Pertanian di Wilayah Pantai Utara Pulau Jawa", ITB Central Library, Bandung

Le, Q.B., Park, S.J. & Vlek, P.L.G. (2010), "Land Use Dynamic Simulator (LUDAS): a Multi-Agent System Model for Simulating Spatio-Temporal Dynamics of Coupled Human-Landscape System 2 Scenario-Based Application for Impact Assessment of Land-Use Policies. *Ecological Informatics* **5**(3), 203-221.

Martin, E. (2007), "Capacity Development in South Asia", Asian Development Bank, Occasional Paper No. 1. Philippines.

McCann, L., Colby, B., Easter, K. W., Kasterine, A. & Kuperan, K. V. (2005), "Transaction Cost Measurement for Evaluating Environmental Policies", *Ecological economics* **52**(4), 527-542.

Mistral, J. (2006), "Market Forces and Fair Institutions: the Political Economy of Europe and the Us Reconsidered", Minda de Gunzburg Center for European Studies, Harvard University.

Morford. (2007). "A Review of Social Indicators for Land Use Planning in British Columbia", Benchmark Consulting Forest Grove, Oregon.

Murtadlo, K., Burhan, U., Sasongko & Multifah. (2013), "Institutional Changes in Land Use and It's Impacts on Farmers Social Economy, Village Sengonagung Purwosari Pasuruan", *Journal of Economics and Sustainable Development* **4**(20), 82-89.

Musyawir. (2011), "Lahan Pertanian di Kota Pasuruan Terus Berkurang", Antara News, Jawa Timur.

Nee, V. (2003), "New Institusionalism Economic and Sosiological", Center for the Study of Economy and Society, Cornel University.

Ningsih, D.A. (2009), "Pengaruh Konversi Lahan Pertanian Terhadap Kesejahteraan Petani", Departemen Sains Komunikasi dan Pengembangan Masyarakat, Institut Pertanian Bogor, Bogor.

North, D.C. (1990), "Institutions, Institutional Change and Economic Performance", Cambridge: Cambridge Univercity Pers.

Nuissl, H., Haaseb, D., Lanzendorfc, M. & Wittmerd, H. (2009), "Environmental Impact Assessment of Urban Land Use Transitions-A Context-Sensitive Approach", *Land Use Policy* **26**(2), 414-424.

Pal, S., Mruthyunjaya, P. K. & Saxena, R. (2003), "Institutional Change in Indian Agriculture: an Overview1", *Institutional Change in Indian Agriculture* **5**.

Parker, D.C., Hess, A. & Davis, S.C. (2008), "Complexity, Land-Use Modeling, and the Human Dimension: Fundamental Challenges for Mapping Unknown Outcome Spaces, *Geoforum* **39**(2), 789-804.

Pascual, U., Muradian, R., Rodríguez, L.C. & Duraiappah, A. (2010), "Exploring the Links Between Equity and Efficiency in Payments for Environmental Services: a Conceptual Approach", *Ecological Economics* **69**(6), 1237-1244.

Raharjo. (2004). Pengantar Sosiologi Pedesaan dan Pertanian, Gadjah Mada University Press. Yogyakarta

Renting, H., Oostindie, H., Laurent, C., Brunori, G., Barjolle, D., Jervell, A.M., Granberg, L. & Heinonen, M. (2008), "Multifunctionality of Agricultural Activities, Changing Rural Identities and New Institutional Arrangements" *International Journal of Agricultural Resources, Governance and Ecology* **7**(4), 361-385.

Rodríguez, N., Armenteras, D. & Retana, J. (2013), "Effectiveness of Protected Areas in the Colombian Andes: Deforestation, Fire and Land-Use Changes", *Regional Environmental Change* **13**(2), 423-435.

Swallow, B. & Kamara, A.B. (2011). The Dynamics of Land Use and Property Rights in Semi-Arid East Africa.

Vellend, M., Brown, C. D., Kharouba, H. M., McCune, J. L. & Myers-Smith, I. H. (2013), "Historical Ecology: Using Unconventional Data Sources to Test for Effects of Global Environmental Change", *American Journal of Botany* **100**(7), 1294-1305.

Yustika. (2005), "Anatomi Kelembagaan Sektor Pertanian", Suara Pembaruan.

Yustika. (2006), "Sumbangan Institusi Lokal dalam Pembangunan Ekonomi", Bayu Media, Malang

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