



Global Advanced Research Journal of Agricultural Science (ISSN: 2315-5094) Vol. 4(7) pp. 325-332, July, 2015.
Available online <http://garj.org/garjas/home>
Copyright © 2015 Global Advanced Research Journals

Full Length Research Paper

Impact of Sales on the Competitiveness of Marginalized Families, the Case of Tomato Producers from Taviche, Oaxaca, Mexico

Rafael Rodríguez-Hernández, Ernesto Bravo-Mosqueda, Porfirio López-López, Pedro Cadena-Iñiguez

Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP), Campo Experimental Valles Centrales de Oaxaca, Melchor Ocampo No. 7, 68200, Santo Domingo Barrio Bajo, Etna, Oaxaca, México

Accepted 13 July, 2015

Insufficient monetary income is one of the dimensions of marginalization and poverty in rural areas of Mexico, a situation favored by the scarce market participation of rural production units. Competitiveness is a concept used to describe the positioning of a production unit in a market. In San Jeronimo Taviche, Oaxaca, a greenhouse tomato production project was implemented through the creation of 27 rural family agribusiness. The aim of this work was to determine the state of competitiveness of these production units and to measure through sales the influence of the market on it, as well as to determine the required goals of unitary yields and production to become more competitive. A questionnaire was applied to the householders to collect information, from which four possible upside and downside sales scenarios were proposed, and from which economic indicators such as production value, auto-consumption value, added value, factor costs and competitiveness were estimated, the latter through the Private Cost Ratio (PCR). The results indicated that 48 % of the FPU's are not competitive, the sales level is inversely proportional to the PCR, which means that the higher sales, the lower the PCR index and the FPU's are more competitive because if sales increase by 30% competitiveness improves by 28%. It is concluded that due the situation of economic vulnerability of the FPU's it is necessary to increase the link to the market by higher sales, for which it is feasible to improve the production and yields.

Keywords: Competitiveness, market, added value, marginalization

INTRODUCTION

Marginalization as a structural phenomenon expresses the difficulty of spreading progress over all the productive structure, as it excludes certain social groups from enjoying

the benefits granted by the development process. The precarious structure of social opportunities for citizens, their families and communities, exposes them to hardships, risks and social vulnerabilities that are often beyond personal, family and community control, whose reversal requires the active cooperation of public, private and social agents (CONAPO, 2011). Marginalization constitutes a

*Corresponding Author's: Email: rodriguez.rafael@inifap.gob.mx;
Tel. 018000882222 Ext. 86213

multiple structural phenomenon that values dimensions, shapes and intensities of exclusion in the development process and enjoyment of its benefits. The dimensions of marginalization are education, housing, population distribution and monetary income.

Of the 32 federal entities that comprise Mexico, three are classified as very highly marginalized (Guerrero, Chiapas and Oaxaca); eight are classified as highly marginalized; nine are located in a medium level of marginalization and 12 are classified as low and very low marginalized; that is 34% of the federal entities are located on a very high and high level of marginalization, whose population presents considerable shortcomings and limitations to join the development process. One feature that most of the marginalized entities show is that the majority of their population lives in rural areas, where main economic activities take place in the primary sector such as agriculture, livestock, forestry and fishing.

Because one dimension of marginalization refers to monetary income generation, financial remuneration is the mainstay of most families. Income earning can not only come from participation in the labour market, but also from possession of assets (productive activities), social transfers and remittances (internal and external). Based on economics context, monetary income determines the capability to purchase goods and services, which is why it is the most determinant factor for marginalization and poverty.

Agriculture is the main source of wealth creation (Brown 2013; Ramirez, 2003), one of the most important monetary income sources for rural families is the sale of their surplus production after having covered their own consumption, thus the higher their level of sales, i.e. its linkage to the market, the higher their incomes, and therefore they will have more resources to reduce their lack food, housing and education. Accordingly, a greater participation in the market is a necessary condition (but perhaps not sufficient) to increase monetary income, which implies that production units should be better able to position themselves in niche markets and to meet specific demands, but mostly to permanently remain in the market in order to achieve their incorporation to the global development process and to get out of poverty. Sales level constitutes the linkage mechanism to the market and it is determined by the production and this in turn by the technology that producers have and use. Competitiveness is a concept used to describe the positioning of a production unit in a distinctive market by means of the attention to specific demands known as niche markets. The competitiveness of an economic unit is determined by its ability to remain in the market (Porter, 1990; Slater, 1996; Porter, 2008; González, 2009), a situation that requires on the one hand greater efficiency in the production of goods or services, efficiency that is determined by an optimum use of land, labor and capital production factors; and on the other hand that the good or service persists in the preference and

taste of consumers, that is, it has a well defined demand, which motivates its purchase. The necessity to endure in the market encourages productive units to implement technological innovations either related to the product or to the process, and this in turn implies the creation and appropriation of knowledge (Tovey, 2009). Competitiveness is a concept linked to the market and is driven by technological innovation, whose aim is value creation.

Rodríguez et al., (2013) point out that improving the competitiveness of rural production units (RPU) is needed to combat poverty; in a study conducted on poor farming families from Oaxaca, it was found that only six percent of them could be classified as competitive and that 94% are not or are on track to achieve competitiveness, a common feature of these families is the low level of monetary income, situation that explains the deterioration of their living conditions.

Porter (1990; 2008) defines competitiveness as an enhanced capacity for market participation, that is, the higher the competitiveness, the greater the capacity for market participation; consequently, there is a direct relationship between competitiveness and the level of market participation, in order that unit production profitability and earnings increase when it is able to better positioning itself within the market economy (Slater, 1996; González, 2009).

Rodríguez et al., (2014) quantify the economic impact of innovation at the level of market linkage and competitiveness on rural production units from two communities of the Sierra Sur region of Oaxaca, Santo Domingo and San Jacinto Tlacotepec Teojomulco; measured economic variables were production value, sales value, auto-consumption value and competitiveness, the latter measured by means of the Private Cost Ratio (PCR). The results indicated that with innovation the linkage to the market through sales increased on average about 22 times compared to the situation prior the intervention and that the structure of production value was reversed, designating the producers more than 50 % of their production value to the market; auto-consumption did not diminish, rather it increased and diversified. The competitiveness of the production units increased by 61.3 %. It was concluded that innovation allowed to strength the production process and the market appropriation by incorporating the farmers into the global development process.

San Jeronimo Taviche is one of the 570 municipalities in the state of Oaxaca, it is ranked as a highly marginalized municipality, where the main activities are performed in the agricultural sector, there is a predominance of traditional crops like corn (*Zea mays*), beans (*Phaseolus vulgaris*) and pepper (*Capsicum sp.*) cultivated with low technology methods, with very small yields and production levels,

regarding to corn less than one tonne per hectare is obtained, while for beans less than 500 kg/ha are obtained.

Since 2009, with the support of the Commission for Development of Indigenous People (CDI) of the federal government agency, 27 small rural family agribusinesses along with the same number of 1000 m² greenhouses were implemented, in order to produce tomato (*Solanum lycopersicon* L.), a fact that has transformed the productive structure, going from a traditional rainfed cultivation of corn and beans, mainly focused on auto-consumption, to an intensive cultivation approach which demands high technology, with a focus in the market. During the early years the experiences regarding the technological change have not been very satisfactory, since there has been a lack of knowledge and technology that the production system based on protected agriculture implies, as a result, because of technical and organizational problems the production and sales levels have been limited.

The aim of this study was to determine the status of competitiveness of the production units and to measure the influence of sales on it, as a mechanism of linkage to the market to improve monetary income, as well as to determine the goals of unitary yields and production required to become more competitive and thus face one dimension of marginalization.

MATERIALS AND METHODS

This work was developed under the project "Building a model based on agribusiness for the competitiveness of small farmers in extreme poverty", that the Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP) carried out in the states of Oaxaca, Chiapas, Veracruz and Yucatan, since 2014; for Oaxaca state the municipality of San Jeronimo Taviche was considered as a pilot community, which is classified as highly marginalized by the Comisión Nacional de Población (CONAPO, 2011), it belongs to the Ocotlan Valley of the region known as Oaxaca's Central Valleys, it is located at 96°35' West longitude and 16°43' North latitude (Figure 1), it sits an elevation of 1700 meters above sea level and has a warm dry weather. The total area of the municipality is 213.06 km², which is equivalent to 0.22 % of the state surface.

According to the census of population and housing 2010, San Jeronimo Taviche municipality has a total population of 1851 persons, comprising 980 (51.3 %) females and 871 (48.7 %) males. The composition of the population by age and sex consists of the following groups: the group 0 to 14 years old comprises 367 men and 379 women; the group of 15-64 years old includes 313 men and 508 women; and the group of more than 65 years old consists of 29 men and 48 women.

The Family Production Unit (FPU) was taken as an analysis base, which according to Cuanalo (2003) is defined as a group of human beings and their means of production, socially organized in order to produce satisfactions for themselves and for their exchange in the market, having the particularity of owning a single identity that defines the times and uses of available labor, land and economic resources.

The information was collected in 2014, through a survey applied to 27 householders who own a greenhouse.

The questionnaire was structured by 100 open and closed questions and divided in three sections:

1. Background of the family unit focused on the compilation of information on the availability of resources for production.

2. Common family unit operations to detect information about market linkage through sales.

3. Perception of respondents about the utilized technology.

The quantified variables per unit of production were: production value, sales value, auto-consumption value and competitiveness.

According to Rodriguez et al., (2014) and Rodriguez and Zamarripa (2013), the production value per family unit was obtained by the sum of the values produced by the *n* activities performed within an agricultural year, these values were calculated by multiplying the production by selling prices, that is:

$$Y = \sum_{i=1}^n P_i X_i = V + C$$

Where

Y = Value of production per family production unit

P_i = Price of the *i* product in the local market

X_i = Production obtained by the *i* crop

V = Sales value

C = Auto-consumption value

The value of sales per production unit, as a measure of market linkage, was calculated in the following way:

$$V = \sum_{j=1}^n P_j X_j$$

Where

V = Sales value

P_j = Price of the sold product *j* in the local market

X_j = Amount of sold product *j* on the local market

The auto-consumption value was estimated using the following expression:

$$C = \sum_{k=1}^n P_k X_k$$

Where

C = Household auto-consumption

P_k = Price of the *k* product on the local market

X_k = Amount of the *k* product consumed per family

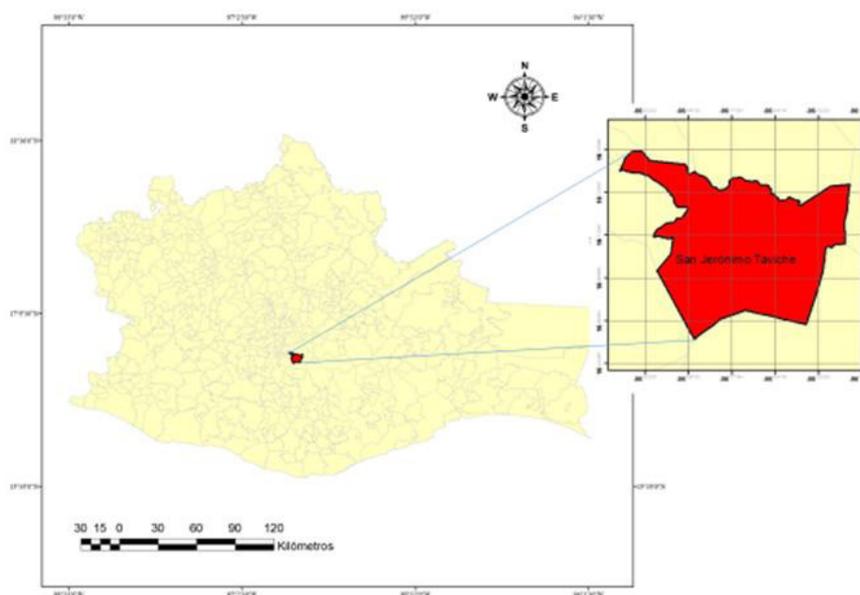


Figure 1. Location of San Jeronimo Taviche, in the state of Oaxaca, Mexico

Although there are several methods to calculate competitiveness, the specific indicator of competitiveness at the level of family production unit used in this study was the one proposed by Morris (1990); Padilla, (1992); Puente (1995), Rodriguez et al., (2013) and Rodriguez et al., (2014), which is called Private Cost Ratio (PCR), another method for estimating competitiveness can be seen in Magaña (2014). PCR is given by the following expression:

$$PCR = \frac{IFC}{AV}$$

Where:

PCR = Private Cost Ratio
IFC= Internal Factors Cost
AV = Added Value

The cost of domestic factors (DFC) expresses the part of the costs of that factors that do not have defined external market or that cannot be easily imported nor exported, such as land, electricity and labor force, among others. This concept is given by the quantity of internal factors multiplied by the price that each one of them has in the market:

$$IFC = \sum_{k=1}^n Z_k P_k$$

Where:

IFC= Internal Factors Cost
Z_k = Quantity of internal factors applied per surface unit
P_k = Price of the internal factors in the local market

The added value (AV) is the difference between the price of a product unit minus the value of the inputs required to produce that product unit, it is expressed by:

$$VA = P_i X_i - \sum_{j=1}^n P_j Y_j$$

Where:

AV = Added Value
X_i = Quantity produced per surface unit in tons
Y_j = Quantity of marketable inputs applied per surface unit
P_i = Price of the product on the national market
P_j = Price of marketable inputs on the national market

Puente (1995) considers that an agricultural system remains competitive if it attempts to minimize PCR by means of keeping low the costs of tradable inputs and internal factors, and getting an AV as high as possible, Valenzuela (2009) points that it is a classic quest within capitalist production to generate the higher added value. In short, the more the PCR is closer to zero, the more competitive is a unit of rural production. Mathematically, PCR has three ranges of possibilities according to its numerical value, and depending on it, crops or productive units can be classified as non-competitive, competitive or on track to become competitive.

Non- competitiveness (PCR<0)

This situation implies that the cost of marketable inputs exceeds the total revenue, so the AV results negative, then according to the PCR formula, the denominator would be negative, and consequently the index results negative. This is a very critical situation for the production unit as it is within a circumstance of extreme vulnerability and it is also an undesirable situation in economic terms, because producers or companies that fall into this category basically survive on value transfers from other economic agents situated outside the production unit. They do not create

value, but consume value. This option appears very rarely, but it can exist.

Competitiveness ($0 < PCR < 1$)

This situation implies that the cost of marketable inputs is smaller than the total revenue, as a result the AV is positive and large enough to satisfactorily cover the cost of internal factors (IFC) and to generate a net profit that will permit to cover the producer's needs. As it gets closer to zero, without turning to it, the VAN becomes larger and/or the IFC becomes relatively smaller. Instead, as it gets closer to one, the AV becomes less sufficient to pay the IFC and therefore the net profit is small. This gap is considered as the optimal strip of competitiveness.

On track to become competitive ($PCR > 1$)

This situation implies that the cost of marketable inputs is smaller than the total revenue, consequently the VA is positive but not large enough to cover the cost of internal factors, so there is no net profit for the producer, IFC is greater than VAN, and therefore there is no profit for the producer. Based on the current situation of production units, four scenarios were constructed in order to measure the sensitivity of economic indicators and the PCR in accordance to changes in sales level, considering 15 % and 30 % in both upward and downward; expected PCR values were obtained in compliance to such changes. Finally, there were estimated the unitary yields required to meet the proposed levels of sales.

RESULTS AND DISCUSSION

Economic indicators

In Table 1, the economic indicators obtained under different scenarios are shown. Current or base situation was considered as starting point for the level of sales, and the effects of potential downward and upward changes in sales level are presented, considering everything else constant. Current or base situation showed the following indicators per year: the production value (Y), also known as total revenue, was US\$6,606.16 for FPU, with an auto-consumption value (C) of US\$920.66, which is constant, the sales value (V) was US\$5,685.50, the cost of internal factors (CFI) was US\$3,833.10 and the PCR was 0.94. This base situation shows that, on average, the competitiveness is acceptable because the PCR is smaller than one and is located within the interval of competitiveness, but that competitiveness is at the edge, to be precise, it is very close to become greater than one which places production units on a certain level of risk or economic vulnerability. The added value (AV) was larger than the internal factors cost, then there is a net profit, albeit small, positive for producers. Starting from this base situation (the one which was present at the time of performing this study) and considering potential scenarios of changes in the level of sales, that is, in the linkage to the

market, if the level of sales increases by 15 %, keeping constant the auto-consumption and the cost of factors, indicators of production value (Y) and AV improve significantly, including the PCR that goes up to 0.79, i.e. it improves by 16 %. In this sense, if sales increase by 30 % compared to the original or base situation, the average Y, AV and PCR per FPU indicators are even better, the latter decreases to 0.68, equivalent to a 27.6 % of improvement.

Relationship between sales and competitiveness

In Figure 1 is presented the relationship between the average amount of sales per FPU and the PCR index, in which it can be seen an inverse relationship between these variables, that is, the higher the sales volume of tomato, the lower the PCR, and therefore, this implies greater competitiveness of the FPUs; on the contrary, the lower the sales, the larger the PCR, which implies that the FPUs are less competitive. It is important to point out that under the current production conditions, production units are in a state of vulnerability in regard to the sales variable, because if it decreases by 15 % the PCR becomes greater than one and hence the FPUs become uncompetitive, this situation is characterized by the insufficiency of the AV to cover the IFC. This inverse relationship can provide a guideline to determine a prediction function for competitiveness, whose independent variable is sales and dependent variable is PCR, assuming a linear relationship that function can be expressed as follows:

$$PCR = f(V) = 2.523 - 0.0003V$$

Where:

$$R^2 = 0.94$$

FPU's situation of competitiveness

In Table 2, it can be observed the classification of FPUs by its competitive position. There are three options or ranges in which they can be positioned according to its obtained PCR. The FPUs that are in a competitive situation, explicitly, those whose PCR were minor than one at the current production conditions, were a total of 14, which is equivalent to 52 % of the total number of FPUs in San Jeronimo Taviche; these production units are efficient because the AV they generate is superior than the cost of production factors and therefore they generate a positive net profit. Therefore, the remaining 48 % (13 FPUs) were not competitive, of which eight were considered on track to become competitive, but at the time of the study were not, and five FPUs showed a negative situation in regard to PCR. The FPUs classified as on track to become competitive showed PCRs larger than one, which means that although they get a positive added value, it is insufficient to cover the cost of production factors and there is no net profit for producers, in contrast, the FPUs with negative PCRs are in a critical situation, as their production costs were higher than the total revenue and they incur into

Table 1. Economic indicators of tomato production FPU relative to the level of sales, US\$/FPU, San Jeronimo Taviche, Oaxaca

Change Sales (%)	is Production Value (Y)	Auto-consume Value (C)	Sales Value (V)	Added Value (AV)	Internal factors Cost (IFC)	PCR
-30	5,064.10	920.66	4,143.44	2,521.14	3,833.10	1.52
-15	5,838.94	920.66	4,918.28	3,295.98	3,833.10	1.16
Base	6,606.16	920.66	5,685.50	4,063.20	3,833.10	0.94
15	7,388.62	920.66	6,467.96	4,845.66	3,833.10	0.79
30	8,163.46	920.66	7,242.80	5,620.50	3,833.10	0.68

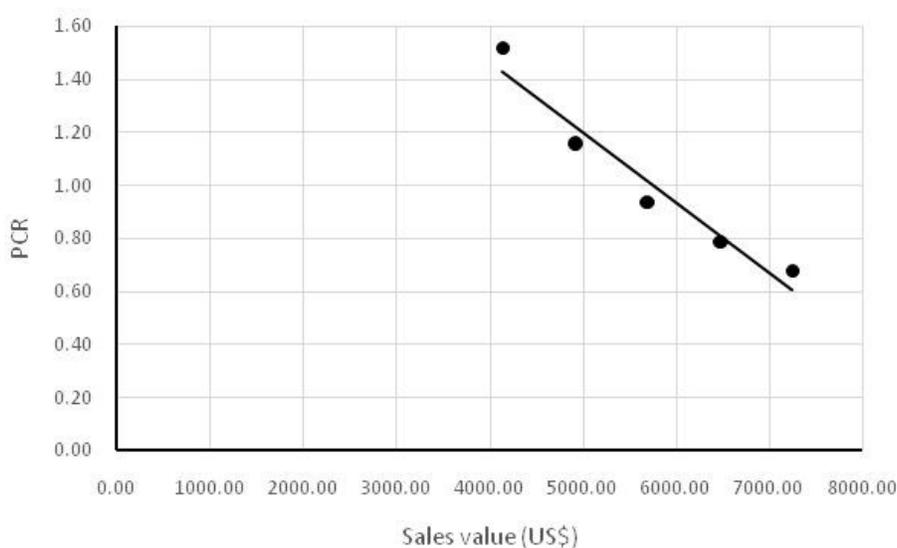


Figure 1. Relationship between the level of sales and competitiveness of producing tomato FPU in San Jeronimo Taviche, Oaxaca

Table 2. The FPU for its competitiveness ratings

Competitiveness situation	Change in sales (%)				
	-30	-15	Current Situation	15	30
Competitive	8	12	14	14	14
Ontrack	13	9	8	9	10
Non-competitive	6	6	5	4	3
Total	27	27	27	27	27

economic losses, the AV was negative, so they urgently need to refocus their production system seeking for efficiency. Under these critical conditions the transfer of funds seems to be the only way to save them or they will end up abandoning the production.

If sales increase by 15%, only one of the FPU found in negativity conditions would rise under the category of on track to become competitive, conversely if sales increase

by 30% 14 FPU (52 %) would be competitive, 10 would be on track to become competitive (37 %) and three UPR would be still negative (11%).

Production and yielding needed to meet sales

Table 3 shows the production and unitary yield of tomato (expressed in kilograms per square meter) required to

Table 3. Tomato production and yield needed to meet sales

Sales variation (%)	Production (kg/FPU)	Yield (kg/m ²)
-30	10648.58	10.6
-15	12930.42	12.9
Base	15212.26	15.2
15	17494.10	17.5
30	19775.94	19.7

meet the increases in sales. Within the current situation, an average production of 15,212 kg of tomato per FPU per year was calculated, which is equivalent to a yield of 15.2 kg/m². To cover a 15% increase in sales, a production of 17,494 kg per FPU with a yield of 17.5 kg/m² is required, in contrast, to cover a 30% increase in sales, a production of 19,776 kg/FPU with a yield of 19.775 kg/m² is required. If sales drop by 15%, production required also lower to 12,930 kg/FPU with a yield of 12.91 kg/m². If sales drop by 30 %, production required to meet sales level is 10,648 kg/FPU with a yield of 10.63 kg/m². This provides guidelines for determining performance thresholds for competitiveness. If yields are below 14.0 kg/m², the FPU would not be competitive, while with yields above this value it will be competitive. Regarding the feasibility of achieving such yielding, Bravo et al., (2010) indicate that it is possible to achieve tomato yields superior to 30.0 kg/m² by combining a series of technological components that together constitute innovations on the production system, such components are: Selection of a high performance hybrid appropriate to local conditions and fruit quality, definition of a nutritional program based on soil and water characteristics, high density planting consisting in five stems per m² in a staggered formation and integrated pest and disease management.

CONCLUSIONS

The FPUs from San Jeronimo Taviche are in the edge of a competitive situation, in economic vulnerability, since with small decreases in sales they could be classified as non-competitive and generate unattractive economic indicators such as total revenue and added value.

Sales as a mechanism of linkage to the market are a variable that determines monetary income, added value and competitiveness of FPUs, therefore the production units of San Jeronimo Taviche should venture more aggressively in the market if they aspire to be more

competitive and to generate higher monetary income, and thus face the problem of marginalization and poverty.

There is an inverse relationship between the level of sales and the competitiveness index, that is, if sales rate increases the index decreases, which means that the FPUs are more competitive and conversely if sales decrease, competitiveness index increases and FPUs are then less competitive. If sales increase by 30 % competitiveness would improve by 28% in regard to the current situation.

The increase in tomato yield per unit area required to meet sales is 4.56 kg/m², from a current average yield of 15.2 kg/ m² to one of 19.7 kg/ m², a situation that is feasible to achieve as there are technology that allows even higher yields.

REFERENCES

- Bravo ME, Rodríguez_Hernández R, López-López P, de D. Bustamante-Orañegui y J, Morales-Guerra M (2010). Manual para la producción de jitomate en condiciones de ambiente protegido. Folleto para productores No. 10. Instituto Nacional de Investigaciones Forestales Agrícolas y Pecuarias. Campo Experimental Valles Centrales de Oaxaca. Santo Domingo Barrio bajo, Etla, Oaxaca, México 72p.
- Brown WJ (2013). El papel de la agricultura en la reducción de la pobreza. *Revista Mexicana de Agronegocios*, 32 (enero-junio) 166-178.
- Consejo Nacional de Población (2011). Índice de marginación por entidad federativa y municipio 2010. Secretaría de Gobernación, México. 54p.
- Cuanalo de la CH (2003). La unidad de producción familiar En: Desarrollo Social Contra la Pobreza. Red Mexicana de Proyectos de Desarrollo Social A.C. Mérida Yucatán. 170p.
- González HG (2009). Ganancias de competitividad: un enfoque agregado y de largo plazo. *Revista Análisis Económico*, 24 (57).1- 25.
- Magaña SPA (2014). Variables que impactan en la competitividad de las micro, pequeñas y medianas empresas agroindustriales de limón en Tecmán, Colima, México. *Revista Mexicana de Agronegocios*, No. 34 (enero-junio) 688-698.
- Morris ML (1990). Determinación de la ventaja comparativa mediante el análisis del CRI: pautas establecidas a partir de la experiencia del CIMYT. Monografía en economía, No. 1, México D.F. 43p.
- Padilla BLE (1992). Evaluación de los efectos de la política económica y análisis de las ventajas comparativas del sector agrícola en Sinaloa. Tesis de maestría en ciencias, Centro de Economía, Colegio de Posgraduados, Montecillo estado de México, Pp. 35-60.

332. Glo. Adv. Res. J. Agric. Sci.

- Pérez-Infante JI (1994). Costes laborales y competitividad de la economía española. *Revista de Economía y Sociología del Trabajo*, No. 25 y 26, Pp. 204-234.
- Porter ME (1990). The competitive advantage of nations. *Harvard Business Review*. March-April. Harvard College. 73-91.
- Porter ME (2008). The five competitive forces that shape strategy. *Harvard Business Review*. January. Harvard College. 79-93.
- Puente GA (1995). Indicadores económicos de la producción de trigo en México. *Publicación especial No. 7. INIFAP. México D.F.* 39p.
- Ramírez JJ, Peña OB, Jiménez LS, Martínez TS (2003). Producción y productividad de la unidad doméstica campesina En: *Desarrollo Social Contra la Pobreza. Red Mexicana de Proyectos de Desarrollo Social A.C., Mérida Yucatán.* 170p.
- Rodríguez HR, Cadena PI, Morales MG, Jácome SM, Góngora SG, Bravo EM, Contreras JRH (2013). Competitividad de las unidades de producción rural en Santo Domingo Teojomulco y San Jacinto Tlascotepec, Sierra Sur, Oaxaca, México. *Revista Agricultura Sociedad y Desarrollo* 10 (1) 11-126.
- Rodríguez HRy, Zamarripa AC (2013). Competitividad de la Higuera Ricinus communis para biocombustible en relación a los cultivos actuales en el estado de Oaxaca, México. *Revista Mexicana de Agronegocios* No. 32 (enero-junio) 306-318.
- Rodríguez-Hernández R., P. Cadena-Iñiguez, S. Góngora-González, S. Jácome-Maldonado, A. Zambada-Martínez, A. Ayala-Sánchez, R. Rendón-Medel. 2004. Linking the market to competitiveness, the role of innovation in rural agriculture in Oaxaca, Mexico. *Global Journal of Agricultural Economics, Extension and Rural Development*. Vol. 2(4), pp. 145-151.
- Sekine A, Hisano S (2009). Agribusiness Involvement in Local Agriculture as a "White Knight"? A Case Study of Dole Japan's Fresh Vegetable Business. *International journal of sociology of agriculture and food*. 16 (29). Pp. 70-89.
- Slater S (1996). The challenge of sustaining competitive advantage, *Industrial Marketing Management Review* 25.74-83.
- Valenzuela FJ (2009). La gran crisis del capital, trasfondo estructural e impactos en México. *Universidad Autónoma Metropolitana, México D. F.* 278p.