Production management in banana production units, El Oro province - Ecuador

Gestión de la producción en unidades de producción bananera, provincia de El Oro–Ecuador

Gestão da produção em unidades de produção de banana, província de El Oro-Equador

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Abstract

This research analyzed production management of 74 agricultural production units, belonging to the Coast Banana Farmers Association (ASOAGRIBAL) from El Oro province - Ecuador. Latent variables were specified such as situational analysis, planning and control and support technology in processes. It were added profitability as a key indicator, considering the financial point of view in this type of organization. The research was positivist, quantitative, analytical, non-experimental, with a transectional and field data design. The data collection instrument designed was the questionnaire, applied through the survey technique. Descriptive results indicate that the variables situational analysis (3.56), planning and control processes (3.40) and production technology platform (3.51) obtained statistical means that allowed them to be classified as good, while the mean value of profitability (3.36) classifies it as regular, far from the classification of excellence. The estimated correlations showed that none of the dimensions under study reached levels of excellence. Results of structural equations model analysis showed a high degree of linear association and positive dependence between the four latent variables; that is, they vary jointly with respect to their average. It is necessary to work on the integration of production tasks as a mechanism to achieve higher levels of profitability, which result in the economic-financial well-being of agricultural companies.

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Resumen

La investigación analizó la gestión de la producción de 74 unidades de producción agrícola, pertenecientes a la Asociación de Agricultores Bananeros del Litoral (ASOAGRIBAL) de la provincia de El Oro – Ecuador. Fueron precisados variables latentes como análisis situacional, planificación y control, tecnología de apoyo en los procesos, sumando desde lo financiero, la rentabilidad como indicador clave en este tipo de organizaciones. La investigación fue positivista, cuantitativa, analítica, no experimental, con diseño transeccional, de campo. El instrumento de recolección de datos diseñado fue el cuestionario, aplicado mediante la técnica de la encuesta. Los resultados descriptivos indican que las variables análisis situacional (3,56), procesos de planificación y control (3,40), y plataforma tecnológica de la producción (3,51), obtuvieron medias estadísticas que permiten cualificarla como buena, mientras que los valores obtenidos para la rentabilidad (3,36) la catalogan de regular, distando de la clasificación de excelencia. Desde las correlaciones estimadas, ninguna de las dimensiones sujetas a estudio alcanza niveles de excelencia. Al aplicar el modelo de ecuaciones estructurales, los resultados evidencian un alto grado de asociación lineal y dependencia positiva entre las cuatro variables latentes; es decir, las mismas varían de manera conjunta respecto a su media. Se debe trabajar en la integración de las labores de producción como mecanismo para concretar mayores niveles de rentabilidad, que redunden en el bienestar económico–financiero de las empresas agrícolas.

Palabras clave: planificación, control, gestión, producción, tecnología, finanzas, sector bananero.

Resumo

A pesquisa analisou a gestão da produção de 74 unidades de produção agrícola, pertencentes à Associação de Produtores de Banana do Litoral (ASOAGRIBAL) da província de El Oro - Equador. Variáveis latentes foram especificadas como análise situacional, planejamento e controle, tecnologia de apoio nos processos, agregando a lucratividade do ponto de vista financeiro como um indicador chave neste tipo de organização. A pesquisa é positivista, quantitativa, analítica, não experimental, transeccional, de campo. O instrumento de coleta de dados elaborado foi o questionário, aplicado por meio de inquéritos. Os resultados descritivos indicam que ao nível da análise situacional (3,56), processos de planeamento e controlo (3,40), plataforma tecnológica de produção (3,51) foram obtidas médias estatísticas que permitem interpretar a avaliação como boa, enquanto os valores obtidos pois a Rentabilidade (3,36) é classificada como regular, distante da classificação de excelência. Ao aplicar o modelo de equações estruturais, os resultados mostram um alto grau de associação linear e dependência positiva entre as quatro variáveis latentes; isto é, eles variam conjuntamente com relação à sua média. Em conclusão, é preciso trabalhar a integração das tarefas produtivas como mecanismo para alcançar maiores níveis de lucratividade, que resultem no bem-estar econômico-financeiro das empresas agropecuárias.

Palavras-chave: planejamento, controle, gestão, produção, tecnologia, finanças, setor bananeiro.

Introduction

Worldwide, the agri-food sector fosters the development of highly complex production systems that are generated by the confluence of multiple economic, political, legal, social and environmental factors that affect the competitive development of agriculture. Research aimed at carrying out diagnoses, analyzes and comparisons, on levels of growth and evolution of this sector, as well as the study of factors that enable or restrict its growth and development found: a) highly unbalanced productive structures socially and territorially, b) problems with agricultural borders, slowdown in growth, increase in hectares of land dedicated to pasture, c) prices and losses, and d) agricultural exports and decrease in prices of agrifood products, among others (Pino *et al*., 2018; García, 2006).

Particularly Ecuador, a predominantly primary and exporting country, diversified in agricultural products, mining and oil (Viteri and Tapia, 2018), has been subject to fluctuations in economic activity. However, the different subsectors that make up the exporting agricultural sector, permanently consider a dialectical relationship with the environment (Ansoff, 1965), with the objective of implementing actions for an adequate allocation of resources, goals and consensual organizational objectives (Chandler, 1962; Kenneth, 1980).

There are great opportunities to generate an attractive offer derived from active crops that direct their production, showing the Ecuadorian agricultural wealth, where banana crop represents an important economic activity, with an increase in extensions that concentrate more than 45 % of the banana farms (Zhiminaicela *et al*., 2020) and where El Oro province is the largest producer of bananas (24.8 %) (National Institute of Statistics and Censuses, 2019); It is one of the most profitable and extensive crops in Latin America and the Caribbean (United Nations Food and Agriculture Organization, 2020).

Bananas, with an important nutritional contributions and good levels of international demand (Zhiminaicela *et al*., 2020) are positioned and supported by international organizations (Trade Center, ITC, 2018; Joint Agency of the World Trade Organization and the United Nations. Trade for Sustainable Development - Tradefor Sustainable Development - T4SD) that establish guidelines to achieve greater transparency and sustainability of international and sustainable trade; All of this is carried out by Ecuador, a country with benefits in the agricultural sector, and large contributions to GDP (Zhiminaicela *et al*., 2020).

Given this scenario, the objective of this research, is to analyze the banana production management of 74 agricultural units from the Coast Banana Farmers Association (ASOAGRIBAL) of the El Oro province - Ecuador, specifying elements such as situational analysis, planning and control, support technology in processes and adding financial profitability as a key indicator in this type of organization.

This research was supported by classical theories of administration that address management, specifying in these cases Frederick Taylor, Elton Mayo theorists that from the scientific administration of work specify principles of efficiency (Taylor, 1911), likewise, from the neoclassical theory, Peter Drucker offers the company areas organization (Drucker, 2003) and projects the production as a core area that makes important contributions. Likewise, the research is based on the Systems Theory proposed by Bertalanffy (1989), which allows recognizing the internal and external context of the organization by giving its importance from its analysis and evaluation. External factors that will always have an influence on the

decisions made by companies are required. From the technological point of view, is central name Chandler, due to the importance of technologies in production processes.

Materiales and methods

The research is analytical-descriptive with quantitative data, and a non-experimental design (Hernández *et al*., 2014), also with transactional design and field data, since it takes primary information from the agricultural sector (Hurtado, 2010); it was developed in El Oro province, Ecuador, which is assumed as the study area, formed by a group of producers who process their fruit and offer fresh bananas with the highest quality standards, serving to different markets around the world. The extension of the study area is more than 5,100 cultivated hectares. The associated producers' plantations are located at El Oro province, mainly in Guayas and Los Ríos, whose tropical climate is ideal for banana production.

The population was made up of agricultural production units belonging to the Coast Banana Farmers Association (ASOAGRIBAL) of El Oro province (agricultural registration units, 2021), which are attended by 8 agronomists who attend the production administrative management. A simple random sampling was applied, taking a representative portion of the population, through the calculation of the sample size for proportions, using the maximum variance criterion, with 5% error and 95% confidence. The following formula was applied to calculate the sample:

$$n = \frac{Nt^2PQ}{e^2(N-1) + t^2PQ}$$

$$n = \frac{92(1{,}96)^2(0{,}5)(0{,}50)}{(0{,}05)^2(92-1) + (1{,}96)^2(0{,}5)(0{,}5)}$$

$$n = \frac{88{,}36}{1{,}19} = 74{,}25 \approx 74$$

Where:

N: population size = 92

Z: standard normal value for 95% confidence level = 1.96

e: permissible maximum error = 0.05

P: probability of success = 0.50

Q: probability of failure = 0.50

Substituting the values in the formula results in a sample size of n = 74

As a data collection instrument, a questionnaire consisting of 95 items validated by experts was designed, the reliability turned out to be 99.4 % according to Cronbach's Alpha coefficient. The mentioned before instrument was applied to the sample attended by the engineers, through surveys and semi-structured interviews in order to provide information about the production units grouped in ASOAGRIBAL.

The core variable studied was production management, a functional area responsible for achieving the transformation of raw materials and goods into intermediate products capable of feeding other chains, or finished products aimed at markets, with the objetive of increasing not only production, but the profit margins of agribusiness. In the production area, the very essence of the processes is developed, and is supported by essential production factors: Land, capital, labor and technology (knowledge) (Meleán-Romero, *et al* 2009). Latent variables definitions are presented in table 1.

Table 1. Definitions of the latent variables from banana production units, El Oro province - Ecuador.

Core variable	Latent Variables	Definition
Production management	F1: Situational analysis	It carries out complete surveys of the organizational environment, considering, on the one hand, external elements and on the other, internal aspects.
	F2: Production planning and control processes	Two essential functions in management, represents closely related processes. The plans are the frame of reference within which the control process works and, on the other, feedback as one of the control phases.
	F3: Production technology platform	Work environments where resources are shared to work, implies the transmission of information and knowledge, promoting the broadening of the perspectives of a business through effective communication (González-Díaz et al., 2020; Zurita and Monge, 2018). Technological platforms represent a transcendental tool to increase the competitiveness of industries (Ojeda-Beltrán, 2022).
	F4: Economic-financial profitability	They show return on investment by carrying out various activities in a certain period of time, it is one of the most relevant financial indicators to measure the success of a business (De La Hoz Suárez et al., 2008).

Source: own elaboration based on the referenced authors

From the definitions of the latent variables originate the observable variables (initial indicators) (table 2), which were measured with a Likert-type scale, containing five response alternatives (always, almost always, sometimes, never, almost never and never). The statistical analysis began with a descriptive analysis of means, standard deviations, maximum and minimum values to characterize the latent variables, whose results were evaluated qualitatively by a scale constructed by estimating a class interval (table 3). Then, a non-parametric Rho Spearman correlation analysis was applied to determine the degree of relationship between the variables studied.

Next, to determine the relationships between observable and latent variables, structural equation models (SEM) were used, which are closely linked to the solution of problems in the social sciences, but originated in biology; their use is basically aimed at the construction of abstract and unobservable situations (Westland, 2015).

The SPSS version 25 (2020) was used as a tool to perform the statistical analysis and the AMOS IBM SPSS software for the modeling of structural equations, in order to support the theory proposed by Byrne (2001) and Kline (2015). According to the results issued by the software, the situational analysis, the planning processes and administrative control of production and the technological platform of production have a positive impact on the economic-financial

profitability of the business. The validation of the FIT measurement model was carried out, using the common indices of absolute and relative fit of the measurement model and that of structural equations.

This made it possible to reduce the number of observable variables from 42 to 23 (table 2) in order to perform a good fit of the structural equations model in both absolute, incremental, and parsimony fit measures.

Table 2. Latent and observable Production Management variables of banana production units, El Oro province - Ecuador.

Latent variables	Observable variables (initial indicators)	observable variables after fitting the measurement model and the structural model
F1: Situational analysis	IC1 Total Cost Leadership Strategies IC2. Expanded differentiation strategies IC3. Market segmentation strategy IC4. potential competitors IC5. Bargaining power with customers IC6. Substitute products IC7. Bargaining power with suppliers IC8. competitiveness	IC1 Total Cost Leadership Strategies IC5 Bargaining power with customers IC8 Competitiveness
F2: Production planning and control processes	IC9 Simulation of operations analysis IC10 Production process IC11 Quality control system IC12 Plants Location and distribution IC13 Performance measurement IC14 Strategies to increase production capacity IC15 Waiting lines IC16 Programming of operations	IC9 Simulation analysis of operations IC11 Quality control system IC12 Location and distribution of plants IC13 Performance Measurement IC14 Strategies to increase production capacity
F3: Production technological platform	IC17 Production management IC18 Planting and harvest planning IC19 Irrigation system IC20 Soil Study IC21 Soil preparation IC22 Agricultural machinery IC23 Seed supply IC24 Seed fertilization IC25 Pest and disease control IC26 Fertilization inputs IC27 Elimination of undesirable plants. IC28 Transport of crops.	IC17 Production management IC19 Irrigation system IC20 Soil study IC21 Soil preparation IC22 Agricultural machinery IC23 Seed supply IC24 Seed fertilization IC25 Pest and disease control IC26 Fertilization inputs IC27 Elimination of undesirable plants. IC28 Transport of crops
F4: Economic and financial profitability	IC29 Projected cash flow IC30 Net present value estimates IC31 Internal rate of return estimates IC32 Capital recovery factor IC33 Cost-benefit ratio IC34 Equivalent annual cost IC35 Equivalent annual profit IC36 Fixed costs IC37 Variable costs IC38 Total income IC39 Total profit IC40 Marginal cost IC41 Marginal income IC42 Marginal utility	IC29 Projected cash flow IC36 Fixed costs IC37 Variable costs IC39 Total profit

Source: own elaboration.

Table 3. Interpretation scale of banana production management variable, El Oro province - Ecuador.

Range	Qualification
[1.0 ; 1.8)	Very Deficient
[1.8 ; 2.6)	Deficient
[2.6 ; 3.4)	Regular
[3.4 ; 4.2)	Good
[4.2 ; 5.0)	Excelent

Source: own elaboration.

Results and discussion

Table 4 shows characterization results of latent variables, it is observed that situational analysis, management of production planning and control processes, and the implementation of production technological platform, were qualified as good; it should be noted that economic-financial profitability variable was evaluated as regular. However, the objective is to reach levels of excellence, which according to those questioned, requires greater dedication and effort on the part of banana producers.

Table 4. Latent variables dimensions descriptive statistics of banana production units, El Oro province - Ecuador.

	N	Average	Standard deviation	Extreme values	Qualitative evaluation
Situational analysis and objectives	74	3.5676	0,756070	2,14-4,79	Good
Production planning and control processes	74	3.4054	0,63793	2,36-4,91	Good
Production technology platform	74	3.5135	0,69310	2,22-4,79	Good
Economic-financial profitability	74	3.3649	0,63190	1,91-4,84	Regular
Valid N (per list)	74				

Source: Own elaboration based on data analyzed by SPSS Ver 25.0 (2022)

Regarding the correlations between the variables (table 5), it can be observed that there is a high degree of linear association between the dimensions that make up the management of production. The values oscillate between 76.9 % and 87.4 % explaining through themselves between 59.14 % and 76.9 % of their variance, indicating cohesion between them.

Table 5. Rho Spearman non-parametric correlation coefficients between the latent variables evaluated in banana production units, province of El Oro- Ecuador (n= 74).

	Situational analysis and objectives	Planning and production control	Production technology platform	Economic-financial profitability
Situational analysis and objectives	1.000	0.780**	0.769**	0.785**
Planning and production control	0.780**	1.000	0.811**	0.874**
Production technology platform	0.769**	0.811**	1.000	0.788**
Economic-financial profitability	0.785**	0.874**	0.788**	1.000

Source: Own elaboration based on data analyzed by SPSS Ver 25.0 (2022)

None of the dimensions under study reached levels of excellence. However, four latent variables were found out of the twenty-three observable variables, thus, it was developing a structural equation model with the purpose of explaining which of the latent variables best explains the latent variable economic-financial profitability of the long-term investment projects, which obtained a lower score in the descriptive analysis performed.

Figure 1 shows the measurement model, which is recursive, since it is made up of the four latent variables (explanatory variables) with each of its observable variables (explained variables) indicated in table 2, which respond to the definitions established for this analysis. These represent the relationships between the indicator variables of the model with their latent constructs and also by the covariance relationships between the latent variables (Vogt, 2015). Each latent with its indicators form a part of the measurement model.

Table 6 shows the validation of the measurement model built by AMOS, where the two absolute fit indicators (PClose and RMSEA) are in the excellent range (Hu & Bentler, 1999), as is, absolute fit indicator and parsimony fit (CMIN/DF); while the incremental fit indicator (CFI) is considered acceptable (Hu & Bentler, 1999), based on this, it is concluded that the Fit measurement model is excellent.

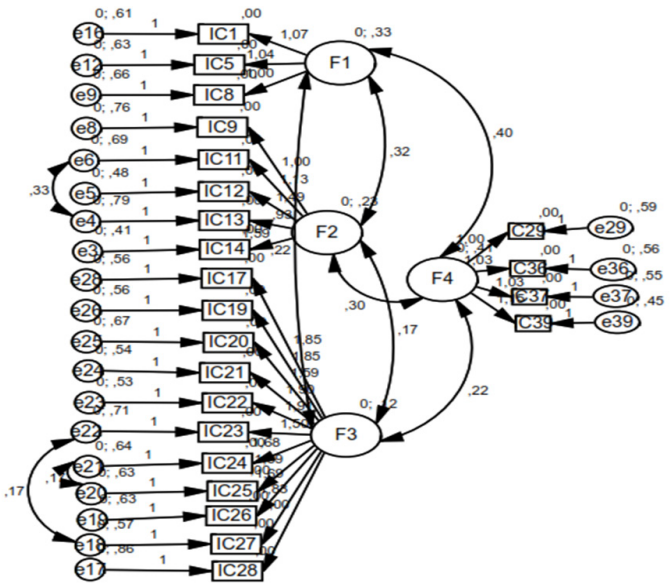

Figure 1. Measurement model for the analysis of latent variables covariances and their dependency relationships in the study of banana production units, El Oro province - Ecuador. F4 (Economic-financial profitability) based on the covariances of the latent variables F1 (Situational analysis and strategic objectives); F2 (Planning processes and production control); F3 (Production Technological Platform); ICn: Indicators (observable variables); in (estimation errors). Source: Own elaboration based on data analyzed by AMOS IBM SPSS software

Table 6. Meassurement model adjustment validation with respect to the latent variables and their dependency relationships in the study of banana production units, El Oro province - Ecuador.

Measure	Estimate	Threshold	Interpretation
CMIN	262.203	--	--
DF	221.000	--	--
CMIN/DF	1.186	Between 1 and 3	Excellent
CFI	0.940	>0.95	Aceptable
RMSEA	0.051	<0.06	Excellent
PClose	0.474	>0.05	Excellent

Source: own elaboration

The structural equation model shown in Figure 2 is the best fit to the observed data, insofar as the covariance matrix implicit in the model is equivalent to the empirical covariance matrix. Once a model has been specified and the empirical covariance matrix has been given, a method for parameter estimation must be selected. Different estimation methods have different distribution assumptions and have other discrepancy functions to minimize (Schermelleh-Engel *et al*., 2003). When the estimation procedure has converged to a reasonable solution, the model fit must be evaluated, which determines the degree of adjustment between the structural equation model and the sample data.

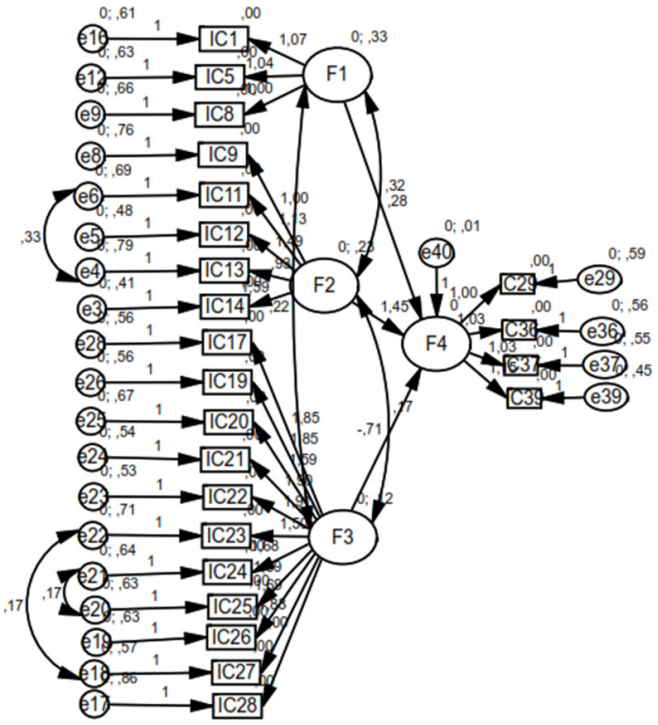

Figure 2. Structural equations model for the estimation of the latent variable F4 (Economic-financial profitability), based on the covariances of the latent variables identified in the production management of banana plantations, province of El Oro- Ecuador. F4 (Economic-financial profitability) based on the covariances of the latent variables F1 (Situational analysis and strategic objectives); F2 (Planning processes and production control); F3 (Production Technological Platform); ICn: Indicators (observable variables); in (estimation errors). Source: own elaboration based on data analyzed by AMOS IBM SPSS software

According to figure 2, the modified model 3 is the one that best fits observed data after applying the modification indices, where the absolute adjustment measures RMSEA (Root Mean Squared Error of Approximation), PCLOSE (Test of narrow fit) are considered excellent. According to Mahatme (2018), these indicate to what extent the structural equation model corresponds to the empirical data. Regarding the descriptive measures based on comparisons of models CFI (Comparative Fit Index), TLI (Tucker-Lewis index) which are considered at acceptable levels according to Hu & Bentler (1999), but not the NFI (Index of normed adjustment) that is in critical levels. According to Schermelleh-Engel *et al*, (2003) the fit index for a baseline model will generally indicate a poor fit of the model and serves as a comparison value. The issue is whether the target model is an improvement over the reference model. Table 7 shows three modifications with respect to the reference model in terms of the modification indexes.

Regarding the descriptive measures of the parsimony model, a progressive decrease in the values of the parsimony goodness of fit index (PGFI), parsimony normed fit index (PNFI), Akaike's information criterion (AIC) and Chi-Square Normalized was observed as the modification indexes are added to the SEM model (table 7); that is, as their value decreases, the model fits the observed data better; that is why parsimony is considered important to evaluate the model fit (Schermelleh-Engel *et al*. *et al*., (2003). The CMIN/DF (Chi-Square Normalized) is the most important indicator; it must be less than 3 to consider the model an excellent fit, as is the case here.

After validating both the measurement model and the structural model, the correlations and covariances between the latent variables were analyzed (Table 8), showing a high degree of linear association and positive dependence between the four latent variables; that is, they vary jointly with respect to their mean. This allows affirming for this case under study, the high degree of integration of the aforementioned latent variables, which in turn represent the scope of action of the production management variable for the ASOAGRIBAL case.

Table 9 shows how F2: Production planning and administrative control processes, explains the perception that the production engineers of the 74 agricultural production units have about the management of F4: Economic-financial profitability for investment in long-term productive projects; while F1: Situational analysis and strategic objectives and F3: Technological platform of production are not significant in explaining F4, with negative regression coefficients and p-value greater than 0.05 for a confidence level of 95%, as shown in part a of table 9. In part b, the standardized coefficients of the model are shown.

Table 7. Model fit measures of the structural equation model for estimating the latent variable F4 (economic-financial profitability) in banana production units, of El Oro province - Ecuador.

	Absolute fit measurements		Incremental adjustment measures			Parsimony adjustment measures				
	PCLOSE	RMSEA	CFI	TLI	NFI	PGFI	PNFI	AIC	Chi-Square Norm	
Reference model	0.179	0.179	0.062	0.907	0.895	0.693	0.803	0.614	437.463	1.283
Modified Model #1	0.358	0.358	0.055	0.928	0.919	0.710	0.625	0.818	424.28	1.220
Modified Model #2	0.415	0.415	0.053	0.934	0.925	0.715	0.627	0.820	421.063	1.203
Modified Model #3	0.474	0.474	0.051	0.940	0.931	0.720	0.52	0.05	418.203	1.186

Source: Own elaboration

Table 8. Correlations and covariances between latent variables subject to study of banana production units, El Oro province - Ecuador.

Covariances: (Group number 1 - Default model)					
	Estimate	S.E.	C.R.	P	Label
F2 <--> F1	,321	,098	3,276	,001	par_19
F2 <--> F3	,169	,071	2,378	,017	par_20
F1 <--> F3	,216	,084	2,559	,010	par_21
F4 <--> F1	,402	,107	3,755	***	par_23
F4 <--> F3	,215	,084	2,551	,011	par_24
F4 <--> F2	,301	,094	3,211	,001	par_25
e4 <--> e6	,332	,097	3,431	***	par_26
e18 <--> e22	,169	0,82	2,073	,038	par_27
e20 <--> e21	,172	,082	2,104	,035	par_28
Correlations: (Group number 1 - Default model)					
	Estimate				
F2 <--> F1	1,171				
F2 <--> F3	,998				
F1 <--> F3	1,068				
F4 <--> F1	1,100				
F4 <--> F3	,955				
F4 <--> F2	,985				
e4 <--> e6	,449				
e18 <--> e22	,267				
e20 <--> e21	,271				

F1: Situational analysis and strategic objectives, F2: Planning processes and production control; F3: Production Technological platform, and F4: Economic-financial profitability. Source: own elaboration

As a result of the analysis, the following structural model was obtained:

$$F_4 = 0{,}278F_1 + 1{,}590F_2 - 0{,}714F_3$$

Conclusions

From the field work carried out and from its findings, positive averages qualified as good, were evidenced for the following latent variables: situational analysis, production planning and control, and technological production platform; however, the profitability variable was qualified as regular according to the means analysis.

The correlational analysis between the variables, showed that there is a high degree of linear association between the dimensions that make up production management, thus demonstrating cohesion between the latent and observable variables.

The applied model also allowed us to show a high degree of linear association and positive dependence between the four latent variables; that is, they vary jointly with respect to their mean. This allows affirming for this case under study, the high degree of integration of the aforementioned latent variables, which in turn represent the production management variable scope of action, for the ASOAGRIBAL case.

It is necessary to work on the integration of production tasks as a mechanism for the efficient allocation of productive factors, and to achieve higher levels of profitability, which result in the economic and financial welfare of agricultural enterprises, through the processes of planning and administrative control of production, which should consider the situational analysis and strategic objectives of agricultural enterprises, as well as its technological platform for production in order to have a greater impact of strategic planning in the administrative management of agricultural production, in El Oro Province.

Finally, the previous analysis is based on the fact that results of this study show that only factor 2 (F2) planning and administrative control of production has a positive and significant impact on Factor 4 (F4) economic-financial profitability, which is the latent variable explained in the study, and that the other factors F1 situational analysis and strategic objectives and F3 technological platform of production do not show any significant impact.

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Table 9. Regression model coefficients for latent variable F4 (Economic-financial profitability) based on the latent variables covariances identified in the banana production units, El Oro province - Ecuador.

	a					b	
	Estimate	S.E.	C.R.	P	Label		Estimate
F4 <---F1	0,0278	0,899	0,31	0,757	par_23	F4 <-- F1	0,249
F4 <---F2	1,59	0,377	4,214	***	par_24	F4 <-- F2	1,086
F4 <---F3	-0,714	4,438	-0.161	0,872	par_25	F4 <-- F3	-0,394

Source: own elaboration based on data analyzed by AMOS and SPSS Ver 25.0 (2022)

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