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## **Explanation and presentation of professional ethics criteria and indicators for the promotion of Social Accountability within Iranian's government organizations using structural equation modeling**

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### **Abstract**

Concurrently, organizations must respond effectively to social expectations and moral law and to achieve success in all areas and by respecting professional ethics adopt an appropriate procedure to achieve these expectations align with organizational goals to facilitates promotion of social accountability and realization of higher goals. In this study, we have formulated a framework by reviewing the literature and related researches so that with application of quality and quantitative combinatory approach as well as utilization of Delphi and judgmental sampling and chain and professional acceptance of scientific and organizational model (32 members), a comprehensive model was instituted in the form of a standard model (individual, organizational and cross- organizational) and 23 indicators of professional ethics to promote social accountability. Then, realized model structures in the studied organizations has been tested through structural equation modeling (confirmatory factor analysis) using smart PLS software. Meanwhile, Cronbach's alpha (0.965) is used to measure questionnaire's reliability in addition to evaluation of validity. Moreover, among national executive accountability, 124 members are selected for this study through Morgan table and stratified random sampling method so that the situation of each dimensions such as individual (3.56), organizational (3.50) and cross-organizational (3.06) were obtained unfavorably. Overall, this study defines a new method to analyze and measurements of enhance public accountability and professional ethics under Iranian's government agencies.

**Key words:** *Ethical Accountability, Social Accountability, Individual Ethical Accountability, Organizational professional Ethics Ethical Accountability, Environmental professional ethics Ethical Accountability.*

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## Introduction

Today, organizational and professional ethics issues has an important role in the world and organized field (Nasiri and Navid, 2016). These issues which can be defined as dos and don'ts of with-philosophical and criteria of right and wrong behavior assesment toward individuals, others and society members, is a kind of issues that has been absorbed interest of scientists and management experts in the past two decades (Taghizadeh and Soltani, 2009). In principle, professional ethics is a structural and functional system that tries to identify possible conflicts and offer sufficient solutions (Campbell and Dyzsyn, 2010). Indeed, the rule of professional ethics in the organization is able to significantly contributes organization in order to reduce tensions and successfully realizing their objectives and made the organizations responsive (Agha-Jani and Izz al-Din, 2014). On the other hand, accountability is a fundamental mechanism of enforcement that is necessary and essential for any social system (Michael, 2009) so that chastising and asking question about entrusted responsibility is also an introduction of accountability (Duff, 2009). It is generally outlined as a social mechanism that includes obligation about explanation and justification of actions (Schillemans, T., & Bovens, M, 2011). Thus, social accountability is an important moral action and considering limitations of accountability is critical issue to understand how to meet the exchange of accountability in terms of moral aspects (Misner, 2009).

Recently, ever-increasing complexity of organizations and increasing the immoral and illegal affairs in workplaces have led administrators and leaders to create and maintain professional ethics and social accountability in all organizations (Rahimnia and Nik-khah, 2011). On the other hand, public sector managers can not neglect the various dimensions of accountability; Because accountability in the public sector is more complicated than private sector (Alvani et al., 2011). Meanwhile, most

of behaviors and activities' roots of managers must be traced in ethics and ethical values and social accountability and all managers must engage in work that is accepted by society and consistent with its values so that this issue is considerably important according to fundamental and major government agencies' tasks and so they should be examined and scrutinized to represent commitments through the promotion of social accountability through strengthening professional ethics in itself and ensure that these commitments are deployed throughout the organization and will expand public accountability.

According to aforementioned issues, this study is aimed to identify the dimensions and different approaches to study professional ethics and social accountability and also will try to answer this question that which model of professional ethics can be presented to improves social accountability of organizations in Iran's government?

### A) professional ethics

The root of "ethics" is derived from the Greek word referred as Ethikos which means "authority of customs and traditions" (Svensson and Wood, 2003: 350). Indeed, Ethics refers to the investigation of human right and wrong choices and subsequently a set of moral values can be defined which could distinguish between right and wrong behaviors (Haroon, M, et al, 2012). In particular, transformation of ethics term into professional ethics wills strength its conceptual meaning because the "professional" is an expertise and proficiency concept (Akbari-fard, 2015: 7).

According to definition of Routledge Encyclopedia, there are similar parts and section within professional ethics, although based on this reality that certain ethical rules must be attributed to especial professional, but from the past it was communal coincidence with Hippocratic Oath was necessitated for doctors (Khaki, 2013).

Moreover, in new definition, professional ethics can be defined as a system of norms so that

	Organizational factors.	social factors	Individual factors	Professional factors
<b>Individual's Ethical knowledgde</b>	Treatment according to organizational's norms	Treatment according to social's norms	Fulfillment of individual aspirations and resources	Treatment contrary to professional standards

▲ Table 1. Individual's ethical actions and its impressive factors (Adapted from Sultani, 2012: 6)

Ethics and professional behaviors can be made by this system and be determined in everyday interactions (Albdol-Rahman et al., 2010). In addition, professional ethics principles have been explained as clear and formal documentation including set of guidelines provided by the company that is a policy for present and future ethical behavior of employees and managers against foreign interaction and society members (Singh J et al. 2005).

On the other hand, standards of professional ethics normally will be established to achieve three main objectives: (1) ensuring compliance with the highest ethical standards in public community, (2) encourage and promote solidarity among employees (3) playing a referee role in dispute resolution created among staff and employees with referred individuals (Bootright, 2014). In this regard, Pennio (2004) divides dimensions of Professional Ethics into three aspects:

#### **2-2-2-1- individual aspects of (personal as-sociation) professional ethics**

Indeed, individual morality impacts on this reality that how a person treats in an organization? (Arjounz, 2011); from another perspective, individual professional ethics includes a set of values and beliefs, education and spiritual development, standards and ethical framework (Daft, 2001).

As can be observed from above table, humans attempt to behave and act in a manner that is consistent with their surrounding factors. In this regard, responding to an factor and neglecting of other factors may create an one-di-

mensional human and and will dispose of human perfection (Soltani, 2012: 7). Moreover, ethical practices impact on moral of service provider forces with affecting on the attitudes of managers, because these practices could generate transparent ethical expectations and probably may contribute sustainable behavior of employees in different situations (Clarín, 2013) .

#### **2-2-2-2- organizational aspect (interpersonal communication) professional ethics**

In this regard, Kathryn G.Denhardt says: "organizational ethics is the process of independent review decision criteria based on prevailing social values within a given organizational boundaries with regard to professional and personal accountability" (Dnhart, 1390: 209). In fact, ethical responsibility plays an important role in increasing the efficiency and effectiveness of organization (Gharamaleki, 50: 2016). There are various factors in this area such as leadership, management, communication with colleagues, subordinates and elites, reward and punishment system, expectations of colleagues, regulations and procedures, organizational culture and atmosphere (Pennio, 2004).

#### **2-2-2-3- cross-organizational aspects (environmental)**

Nowadays, organizations are one of the most important social institutions so that they widely impact on various aspects of human life and their nature concern with how to organize the communication behavior as a legal entity with the environment (Salvati et al., 2013). There-

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fore, the requirements of social ethics enforce members of a given group to treat in a manner that keep all people and also facilitate group enhancement (Shafritz & E.W. Russell, 2014). Indeed, ethical promotion in business and Ethical excellence organizational culture not only generates joyful and suitable environment to increase productivity and efficiency, but also play an effective role in society beyond the organization (Beek-Zad et al., 2010). In this study, personal, organizational and cross-organizational aspects of professional ethics are used as follows:

### B) Social Accountability

In particular, accountability is defined as “the condition of responsiveness”, person obligation or willingness to accept responsibility for personal actions from culture perspective (Gotez, A & Jenkins, R, 2002). This term is a complex and species type that is reformed as a common word (Moulgan, 2000: 224).

The concepts of accountability is outlined in all communities in public, private, non-profit sector organizations and encompass a high level of abstract and it is difficult to provide common sense and consensus about it (Pollitt, C., & Hupe, P, 2011). In general, modification of accountability concept can be concerned with structural variation in politics and public administration that had been happened from the 1980s (Iyoha, F. O. and Oyerinde, D, 2010). Social accountability is an issue that has received considerable attention over the past two decades (Shieh, 2016). Recently, the concept of social accountability has been modified to social organizational accountability (Alwani and Ahmadi, 2013). At the same time, accountability is defined in different ways but its essence and origin is always the same: commitment to meet accountability against accepted responsibilities (Cut and Murray, 2001, 1). According to Ackerman viewpoint, social accountability refers to degree of effectiveness of an organization in demonstration of following actions to fulfill social responsibility (Alwani and Ahmadi, 2013).

Frederick Bound points out that the organizational and strategic form of social accountability is concerned with an organization in which organizations actually respond to social expectations (Ecimovic & Esposito, 2008). Indeed, accountability against beneficiary groups, charities, NGOs and other stakeholders is defined as social accountability (Bounz: 2006). Moreover, accountability can also be defined as a social relationship where an agent (person or organization) meet commitment to explain and justify its actions to a number of other important factors (Bounz, 2005:3). Accountability involves interaction and social exchange as an alignment and enforcement rules (Bounz, 2005). As a result, compatibility with the environment situation and social audits is also important for organizations accountable to the community (Miguel, 2004).

### Conceptual model

In this study, 33 indicators derived from scientific studies have been classified on three criteria of professional ethics (individual, organizational and cross-organizational) to enhance social accountability so that social accountability is endogenous variables in this model and professional ethical criteria are exogenous variables. Subsequently, final model is provided in Table (2).

### Research questions

#### The main question

What are professional ethics pattern to promote social accountability in Iran's government agencies?

#### Subsidiary questions

- 1) what are criteria and indicators of professional ethics to promote social accountability in Iran government agencies?
- 2) how much is each dimension identified in the professional ethics importance in order to promote social accountability in government agencies?

### Research methodology

This study is research development in terms of objectives. Moreover, this study is applied research in terms of achievement or result and

Ethical Accountability model for promotion of social Accountability	criteria	dimensions
actively involved in community groups (0.25) assisting to your fellow member (0.628) social commitment to environmental issues (0.880) social benefits rather than personal interests (0.852) Respecting to rights of citizenship (0.484) Optimal usage of public facilities (.642) voluntary accountability beyond the tasks according to Islamic teachings (0.625)	Individual Ethical (0.845) Accountability	(0.859) promotion of Social Accountability
compensation for losses incurred as a result of the implementation of programs to stakeholders (0.728) formulation of policies with regard to the values and norms of society (0.814) provide timely and quick service and avoid wasting time of clients (0.686) Non-discrimination in human resources with regard to employment conditions (0.870) Correction procedures according to feedback resulting from the implementation of programs in the community (0.889) Respecting to application of physical assets and intellectual property right (0.815) Responsible commitment to environmental issues (0.713)	Organizational professional (0.659) Ethics	
Efforts to provide standard services to the public by taking advantage of national and international experiences (0.735) publish report on implementation of social obligations (0.644) leadership in promoting a culture of respect and honestly accountability to people (0.643) 19. Adopt necessary mechanisms for providing services to the disabled and the elderly individuals (0.775) participation in sustainable development and create a better life for future generations (0.835) Efforts to preserve and restore the natural resources and the environment (0.837) cooperation in preventing and resolving social crisis (0.801) Create appropriate mechanisms for adopting viewpoints of citizens (0.642) Avoiding transmission of social participation costs to beneficiaries (0.431)	Cross-Organizational professional Ethics (0.853)	

▲ Table 2. The final research model



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in terms of data collection is descriptive-survey research. In addition, data are collected by using a combination of qualitative and quantitative method so that qualitative data collected are handled through text analysis and with key informants and quantitative data are collected through a developed questionnaire. The population of this research includes accountability measures Financial Controller appointed deputy national administrative units of the Ministry of Economic Affairs and Finance so that they are totally 190 members in which statistic sample size is obtained 127 by using Morgan table.

## Results

In order to evaluate the basic extracted indicators (from various sources of 33 index), ques-

tionnaires have been submitted to experts in three temporal intervals (32 experts) so that after multiple delete, add and modify 23 indicators finally have been approved. The final set of indicators are customized in the form of questionnaires and have been distributed and collected among 130 members of the Financial Controller and Financial Controller deputies so that 124 questionnaires have been returned and are used to describe research variables measuring central tendency and dispersion due to this fact that research data contains distance scales. The results indicate that the average value of replies is less than 4 which demonstrate an unfavorable assessment of respondents.

In addition, induces of skewness and elonga-



tion are used to check the normality where respect to the following table the absolute value of skewness and elongation induces are determined less than 2 so it can be said distribution of data for all variables is normal.

In this study, factor loadings are used to analyze the structure of questionnaire and discover the constituent elements of each structure. Accordingly, all factor loadings are obtained greater than 4.0 and have a significance level less than 0.05. Indeed, results show that the relationship between structure and hidden variables have been invoked and encompassed necessary reliability. Meanwhile, results of factor loadings variables are shown in Table 3. Obviously, an indication that has higher load factor, will be achieve higher importance than other indices.

#### Validation of measurement models

In this study, a confirmatory factor analysis is being used. In confirmatory factor analysis researchers is aimed to determine the structure of a particular factor. In this regard, measurement model validation criteria are presented in detail as follows.

#### Investigation of research diagram and analysis results

It is necessary to be ensured of accuracy of measurement models exogenous and endogenous variables. Figure (1) shows confirmatory factor analysis of multilevel models in under standard coefficients estimation mode. Meanwhile, exogenous and endogenous variables are ethnical pattern variable and social accountability promotion, respectively. Figure (2) shows confirmatory factor analysis model under a significant absolute value (t-value). In fact, this model tests all the equations and structural equation model using the statistic t. According to this model, path coefficient is significant at 95% confidence level subject to statistic t value being higher than 1.96.

Convergent Validity, Composite Reliability (CR), Goodness Of Fit

Table (4) shows indicators of model's reliability, validity and fitness. In this study, conver-

gent reliability is used so that by applying an average variance extracted it is determined that all studied structures have an average variance extracted higher than 0.5. Moreover, composite reliability (CR) induces and Cronbach's alpha are used to assess questionnaire reliability. Subsequently, all these factors are obtained higher than 0.7 and show the reliability of measurement tool.

#### Discriminant validity

The necessary condition for confirming discriminant validity is being square root of the average variance higher than corresponding coefficients of correlation with other variables. Subsequently, during the analysis conducted the explained mean root square of variance for all the variables is obtained higher than variables correlation with other variables.

Goodness of fit (GOF) indicator

According to obtained results, fitness is determined equal to 0.638 and is larger than 0.4 which indicates perfect model fitness. In simpler words, this study's data has a sufficient fitness with factor structure and theoretical foundation of and this implies compatibility of outlined questions with theoretical constructs.

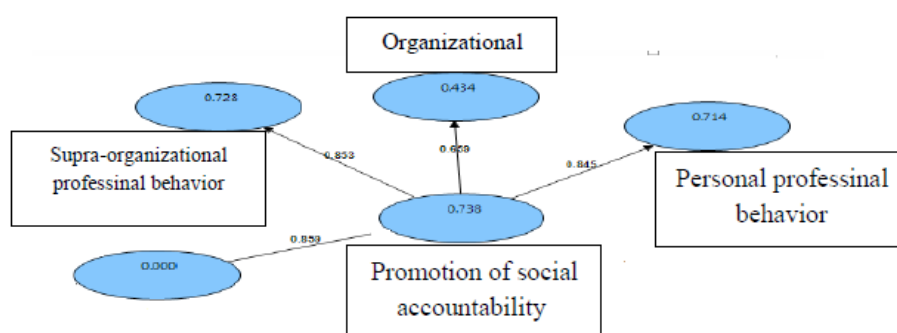
Evaluation of current variables status

According to the choice of 7 rated Likert scale for inquiries constituent variables, we must evaluate values respondents' viewpoints to clarify this issue that whether their responses averagely has a significant difference with 4 (norm value) or not? In the following, descriptive Results are shown in Table (5):

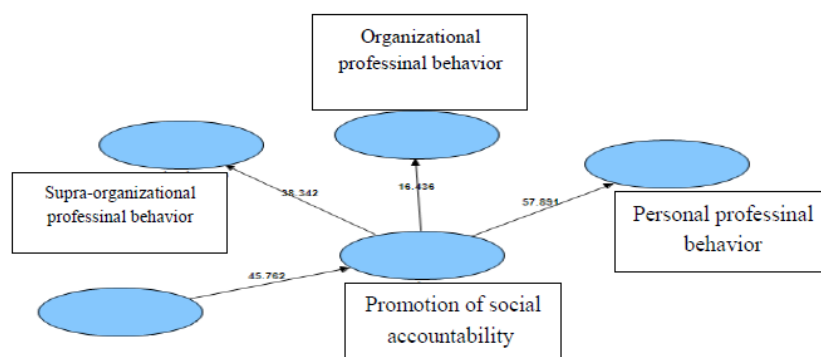
In order to evaluate individuals' viewpoints, obtained average from individuals' responses have been assessed with theoretical average and also one-sample t-test average has been used such that according to 95%, confidence distance, the result of both bound (which are negative) demonstrate undesirable evaluation of social accountability promotion criteria. Moreover, one-sample t-test results are shown in Table (6).

results	Significance level	Factor loadings	Hidden variables
permissible	<0.01	0.845	Individual
permissible	<0.01	0.659	Organizational
permissible	<0.01	0.853	Organizational learning
permissible	<0.01	0.859	Total

▲ Table 3. Results of factor loadings



▲ Figure 1. confirmatory factor analysis model under standard coefficients estimation mode



▲ Figure 2. Model under a significant absolute value (T-Value)

### Friedman Analysis of variance (ANOVA) for ranking

According to results of SPSS software, significant output value (sig) is obtained less than 0.01 and close to zero and is lower than standard significance level ( $\alpha=0.05\%$ ). Hence, H1 hypothesis has been confirmed within a confidence level of 95%. Therefore, we can declare that there is significant difference at 95% confidence level among factors ranking and their ratings are not equal. According to table

(7), professional ethics of individual variables (achieved highest mean scores) and in accordance with this table each variable that has a higher average rating is more effective.

### Conclusions and recommendations

According to problem that was discussed in this study, we present results and proposals related to separation hypothesis as follows:

According to presented model and obtained results, despite current state of professional ethical standards (individual, organizational

GOF	$\sqrt{R^2}$	$\sqrt{AVE}$	Cronbach's alpha	R <sup>2</sup>	CR	AVE	Criteria	Hidden variables
0.638	0.797	0.801	0.787	0.706	0.849	0.593	Individual	Promote social accountability
			0.9	0.43	0.921	0.626	Organizational	
			0.874	0.731	0.902	0.512	Cross-Organizational	
			0.895	0.737	0.909	0.786	total	

▲ Figure 2. Model under a significant absolute value (T-Value)

Standard deviation	mean	Sample size	Changing research	The main variables
0.313	3.565	124	Professional ethics (individual)	Promote social accountability
0.417	3.500	124	Professional ethics (organizational)	
0.477	3.063	124	Professional ethics (cross-organizational)	
0.237	3.376	124	total	

▲ Table 5. Descriptive results

Assessment result	confidence distance		Significance level	T statistics	Research variable	The main variables
	upper bound	Lower bound				
Undesirable	-0.38	-0.491	0	-15.476	Individual professional ethics	Promote social accountability
Undesirable	-0.426	-0.574	0	-13.359	Organizational Ethics	
Undesirable	-0.852	-1.022	0	-21.874	Professional cross-Organizational ethics	
Undesirable	-0.38	-0.491	0	-29.353		total

▲ Table 6. One-sample t-test results

and cross-organizational) are not favorable and considering individual standards of professional ethics in terms of current status (3.565) and rating adopted (7.85) to promote social accountability in government agencies, it will be proposed that employees participate and cooperate further in the public interest groups related to their duties and also assist their destitute fellows and behave a social commitment

to environmental issues and entirely respect to civil rights of individuals and utilize public facilities in optimal manner and take voluntary responsibility beyond their duties according to teachings of Islam.

According to results, organizational standards of professional ethics to promote social accountability is deployed in a more unfavorable situation rather than individual criteria in



rating	Average Rating	Research variables	The main variables
1	7.85	Individual professional ethics	Promote social accountability
2	7.24	Organizational Ethics	
3	5.60	Professional cross-Organizational ethics	

▲ Table 7. Friedman ANOVA for ranking

terms of current status (3.50) and rating (7.24). Therefore, in order to improve organizational status, it is recommended to quickly compensate financial loss applied to other members during running programs and not discriminate according to the conditions of employment in human resources and correction procedures must be adopted according to feedback returned from the implementation of programs in the community and also respect for relevant property rights in the application of physical and intellectual assets and entirely have a responsible commitment to environmental issues.

According to obtained results and adopted rankings, cross-organizational criteria of professional ethics for government agencies to promote social is in an unfavorable situation than the individual and organizational criteria accountability in terms of the current status (3.06) and rating (5.60) so that in order to provides promotion of social accountability in terms of cross-organizational of professional ethics it will be recommended to respect toward necessary standards in providing services to the public and also attempts to dissipate reports of active social obligations and also upgrade the participation of local communities in the preservation and restoration of natural resources and environment and in addition to prevention and solving social crisis, transmission of social participation costs into stake-

holders should be avoided.

To summarize, government agencies' managers must adhere more than ever to standards and social norms through using professional ethical criteria and also respect to justice in providing services which could lead to promotion of all aspects of social accountability in government agencies to be provided.

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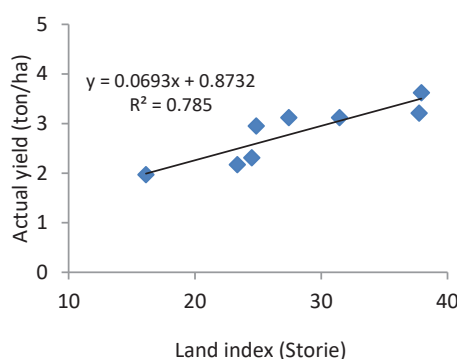
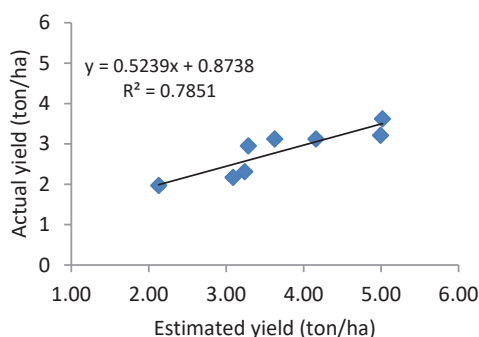
Parameters	Data
Mean temperature of the growing cycle (°C)	23.17
Leaf area index (m <sup>2</sup> . m <sup>-2</sup> )	4.6
Harvest index	0.45
Mean bo of the growing cycle (Kg CH <sub>2</sub> O ha <sup>-1</sup> h <sup>-1</sup> )	251.54
Mean bc of the growing cycle (Kg CH <sub>2</sub> O ha <sup>-1</sup> h <sup>-1</sup> )	476.05
Mean f of the growing cycle	0.55
Ct	6.75×10 <sup>-3</sup>
Growth cycle (day)	132

▲ Table 5. Required plant characteristics and climatic parameters for calculation of rice radiation thermal production potential

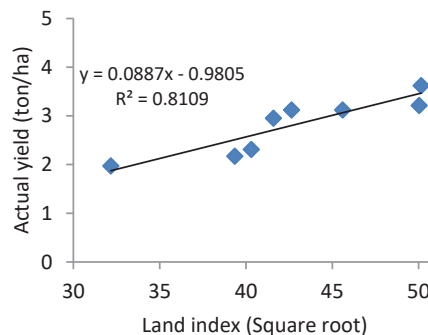
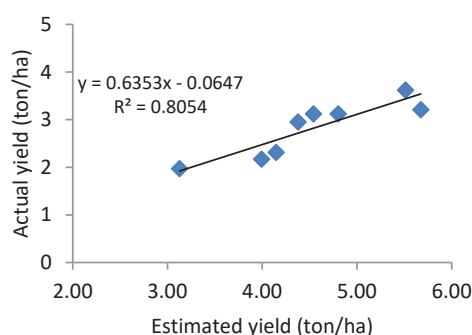
LU	Storie	Square root			Quantitative land suitability class	Actual yield (ton/ha)
	Soil index	Estimated yield (ton/ha)	Soil index	Estimated yield (ton/ha)		
1.1	27.85	2.13	40.89	3.13	S3	1.97
2.1	40.39	3.09	52.21	3.99	S2	2.17
2.2	65.28	4.99	74.18	5.67	S2	3.21
2.3	47.42	3.63	59.36	4.54	S2	3.12
3.1	42.97	3.29	57.24	4.38	S2	2.95
3.2	54.37	4.16	62.79	4.80	S2	3.12
4.1	42.36	3.24	54.22	4.15	S2	2.31
4.2	65.60	5.02	72.08	5.51	S2	3.62

▲ Table 6. Results of quantitative land suitability evaluation for various land units

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▲ Fig. 2 Relationship between actual yield and estimated yield and land index using Storie parametric method



▲ Fig. 3 Relationship between actual yield and estimated yield and land index using square root parametric method

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