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Sustainable Relations in International Development Cooperation Projects: The Role of Organizational Climate

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ABSTRACT

The importance of the human side of project management to assess the success of international development project has not been fully considered yet. An analysis of the literature on the project success definition, focused on the success criteria and success factors, was carried out. The organization's effectiveness, in terms of Relations Sustainability, emerged as a criteria integrating the "time, cost, performance" approach to define a project success. Based on previous research contributions on the factors influencing the organization's effectiveness, the paper expands the analysis of the influence of Organizational Climate on the Relation Sustainability between project manager and project team involved in international cooperation for development. The statistical methods used include confirmatory factors analysis and structural equation modeling. The results carry implications for project management identifying five dimensions of Organizational Climate (trust, innovation, social cohesion, communication and job challenge) influencing Relations Sustainability. This finding suggests that Organizational Climate contributes to project success by creating trust, stimulating commitment and generating satisfaction to overcome conflicts between project manager and project team.

Keywords: relations sustainability, organizational climate, organizational effectiveness, project management, project success

1 Introduction

The project is central to every activity related to international cooperation for development (Hirschmann, 1967). The definition of the criteria to measure a project success and to understand its determinants, is strictly related to the meaning of the term "*success*" when applied to a project (Cooke-Davies, 2002). This topic is broadly discussed in the management theory literature (Koelmans, 2004). A commonly shared evaluation framework for the definition and measurement of a project success is still lacking (Shenhar et al., 2001) as the many contrasting opinions on the characteristics of a successful project show (Freeman and Beale, 1992). According to Prabhkar (2008) *"the only agreement seems to be the disagreement on what constitutes project success".* Some authors consider that a definition of success is not universally valid, both in space and time, but only a perceived success can be considered (Baker et al., 1988); each project stakeholder will perceive (Meredith and Mantel, 2003), interpret (Stukenbruck, 1986; Widemann, 1998; Koelmans, 2004) and evaluate success in different ways (Shenhar et al., 1997). The complexity of the theoretical aspects involved asks for an adequate recognition of its conceptual dimensions (Diallo and Thüillier, 2004).

2 Theoretical background and research hypothesis

To assess a project performance it is important to distinguish between criteria and factors related to its success (De Witt, 1988). Criteria can be defined as *"the set of principles or standards by which favourable outcomes can be completed within a set specification"* (Chan and Chan, 2004); they measure the level of success of a project. Factors, instead, consist of managerial tools influencing a successful project (Cooke-Davies, 2002). In Tables 1 and 2 respectively, the main criteria and factors related to a project success reported in the literature are listed.

Table 1.
Success Criteria

Pinto J.K, Mantel S.J. (1990)	Freeman M., Beale P. (1992)	Kometa S. *et al.* (1995)	Kumaraswamy M.M., Thorpe A. (1996)	Songer A.D. *et al.* (1996)	Atkinsons R. (1999)	Sadeh A. *et al.* (2000)	Chan A.P.C., Chan A.P.L (2004)
Implementation process	Technical performance	Time schedule	Time schedule	Time schedule	Time schedule	Meeting design goals	Time schedule
Perceived value of the project	Efficiency of execution	Construction cost	Cost	Cost	Cost	Benefit to the end user	Health and Safety
Client satisfaction	Managerial and organizational implications (mainly customer satisfaction)	Running/ maintenance cost	Quality of workmanship	Conforms to user's expectations	Quality	Benefit to the developing organization	Partecipants's satisfaction
	Personal growth	Safety	Project manager's satisfaction	Meets specifications	Efficiency	Benefit to the technological infrastructure of the country and of firms involved in the development process	User expectation/ satisfaction
	Manufacturer ability	Flexiblity to users	Client's satisfaction	Quality workmanship	Benefits to stakeholders involved with the project		Environmental Performance
	Business performance		Transfer of technology	Minimises construction aggravation	Criteria from project manager, top management, customer-client, team member		Commercial Profitable/ value
			Friendliness of environment		Resultant system		Quality: e.g. Technical specification
			Health and safety		Impact on customer		Cost: e.g. Variation cost, modification cost, legalclaims and litigation
					Businness success		

Table 2.
Success Factors

Might R.J., Fischer W.A., (1985)	Slevin D.P., Pinto J.K. (1986)	Pinto J.K, Prescott J.E. (1988)	Verma V.K. (1995, 1996)	Murray, J.P. (2001)	Jiang J.J, Klien G. (2002)	Dong C. *et al.* (2004)
Organizational structure	Cleary defined goals	Project mission	Communication	Appropriate senior management levels of commitment to the project	Bypass the obstacles	Effective communication
Level of authority delegated to the project manager	Management support	Management support	Teamwork	Adequate project funding	Cause people to stretch	Management support
Size of the project	Competent project manager	Project schedule	Leadership	Well-done set of project requirements and specifications	Focus on the goal	User involvement
	Competent project team members	Client acceptance	Effective human resources	Careful development of a comprehensive project plan	Follow a standardized process	Project manager and team members
	Sufficient resource allocation	Personnel		Reporting of the status of the project	Learn from the past	Project definition
	Adequate control mechanisms	Technical tasks		Commitment of time and attention on the part of those outside the department who have requested the project	Maintaining ongoing communications	Project planning
	Adequate communication channels with feedback capabilities	Communication		Critical assessment of the risks inherent in the project	Record the work being done	Project control and change management
	Responsive to client's needs	Monitoring		Ability of the project team to manage the risks	Reuse previous work	Technology support
		Trouble-Shooting		Development of appropriate contingency plans	Seek buy-in from all involved	
		Client consultation		Assessment of the ability and willingness of the organization to stay the project course	Seek simplicity in goal and path	

So far evaluation criteria have been adopted by the different international cooperation institutions to monitor their projects performances, mainly related to technical and financial aspects (Shenhar et al., 2001; Diallo and Thüillier, 2004). Within this framework "*time, cost* and *performance*" were the most important criteria defining the success of a project, originating a vast literature on the subject (Pinto and Slevin, 1988; Lim and Zain, 1999; Hatush and Skitmore, 1997; Walker, 1995, 1996; Navarre and Schaan, 1990). However, a project success is something more complicated than the time, cost and performance criteria (Pinto and Slevin, 1988). According to Baker (1988) *"in the long run, what really matters is whether the parties associated with, and affected by, a project are satisfied"*. Following this line of thinking a project success is defined in terms of organisation effectiveness (Shenhar et al., 2001), where the human side of project management (Kloppenborg and Opfer, 2002) represents a fundamental criteria integrating the technical-financial aspects (Scott-Young and Samson, 2004). The human side of organization effectiveness could be considered in terms of Relations Sustainability, which refers to the expectations and desires of the individuals involved (Jarvelin and Lehtinen, 1996), their relations' quality and in their capacity to understand the needs, the requests and the priorities of the other stakeholders (Gido and Clements, 1999). It is defined by variables such as trust, commitment, satisfaction and positive collaboration history (Lages et al., 2005; Fischer et al., 2010).

The human side of project management plays an important role also as a factor influencing project success. This is confirmed by many critical observations to the Project Life Cycle Management methodology (PLCM) (Slade, 1981; Thin, 1998; Coleman, 1992; Maddock, 1994) showing that in many successful projects the management methods and strategies adopted were completely different from the *"participatory, stakeholder, process* and *consensus"* approaches. What made the difference, in these cases, was the central role played by the human factor during the planning and strategic management phase (Biggs and Smith, 2003; Wood, 1998). This is also confirmed by Ferris et al. (1988) stating that the organization effectiveness is influenced by factors related to its human side: Human Resource Management (HRM), Organizational Culture and Organizational Climate.

While HRM is a relatively widely known subject, Organizational Culture and Climate need to be further discussed. The terms are considered as synonymous (Barker, 1994), creating ambiguity in their

interpretation and conceptual overlapping; this prevented a clear definition of their different nature (Schneider, 1985; Ryder and Southey, 1990). Organization Culture *"defines the way of doing things in order to give meaning to organizational life"* (Arnold, 2005); it is based on values and assumptions (Pettigrew, 1979; Schein, 1985; Hatch, 1993) influencing the relations between members of the same organization and the external relations with other stakeholders (Hill and Jones, 2001). Organizational Climate, on the other hand, is defined as *"employees perceptions of events, practices, and procedures as well as their perceptions of behaviors that are rewarded, supported and expected"* (Schneider et al., 1992). It is a rough indicator of the organisation culture (Schein, 1985) and reflects the organization members' perception, behavior and attitudes (Moran and Volkwein, 1992; O'Driscoll and Evans, 1988; Zeitz et al., 1997).

Many studies showed the influence of Organizational Climate on organization effectiveness (Mudrack, 1989; Franklin, 1975). In the field of project management several authors consider a set of factors, related to the Organizational Climate, able to influence the sustainability of the relations within a teamwork (Pinto and Prescott, 1993; Fleming and Koppelman, 1996; Lopes and Flavell, 1998). Guzzo and Dickson (1996) classify these factors into three categories: organisational variables (e.g. autonomy, interdependence, definition of responsibilities); context variables (e.g. skill and communication); mediation variables (e.g. cooperation, social cohesion). Other authors' hypothesis consider six variables as able to influence the sustainability of the relations within a teamwork: communication, coordination, balance of member contributions, mutual support, effort and cohesion (Hoegl and Gemuenden, 2001). Diallo and Thüillier (2004) underline how trust, communication and cooperation influence interpersonal relations among the teamwork members, their relations with the project manager and with other stakeholders. Zeitz et al. (1997) considers five dimensions defining the Organizational Climate (job challenge, communication, trust, innovation, and social cohesion) able to influence the organization effectiveness.

According to the theoretical background, an empirical evaluation of the role of the human side of project management in defining the criteria and factors related to a project success should take into account the link between Organizational Climate and Relation Sustainability (Figure 1).

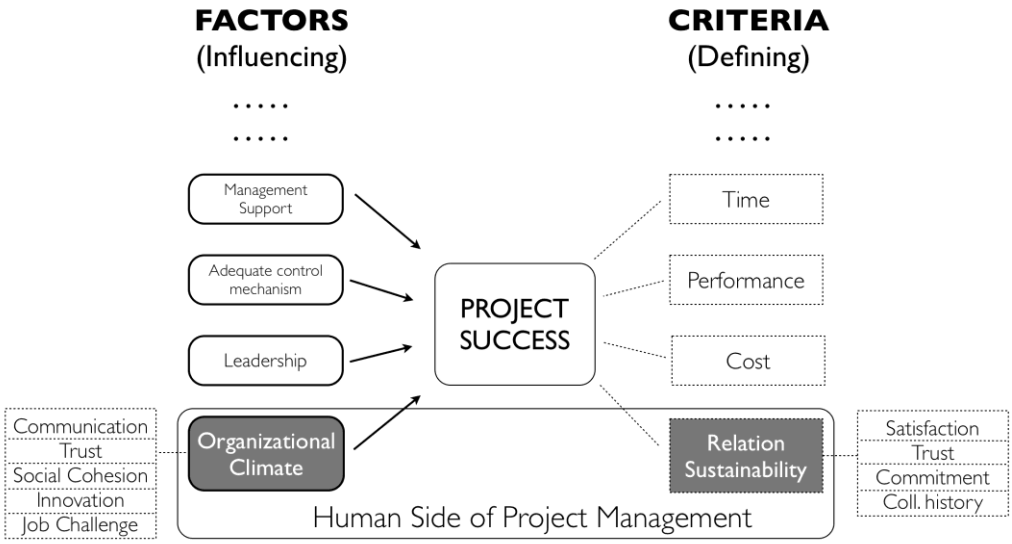

Figure 1. The conceptual model

As far as international development projects in agriculture are concerned, there is a lack of empirical evidence related to this assumption. Considering its relevance as a tool for a more effective project success assessment, the present paper aims to empirically test the hypothesis that Organizational Climate influences the Relations Sustainability between the project teamwork and the manager involved in international cooperation development projects in agriculture. This type of relationship is considered as one of the most important criteria defining the project success (Diallo and Thüillier, 2004)

3 Research methodology

The analysis carried out in the present paper aims to answering the following questions: what are the different dimensions defining the Organizational Climate? What is the Organizational Climate role in influencing the Relations Sustainability between the project teamwork and the manager involved in international cooperation development projects in agriculture?

3.1 The method of analysis

Answering the research questions implies a complex analytical structure which can be effectively managed by using an approach based on a SEM (Structural Equation Modeling) (Byrne, 2010). This method allows for complex phenomena to be statistically modeled and tested, by considering the relationships among multidimensional theoretical constructs as the ones included in the hypothesis defined and the related research question.

In particular the quality of the analysis was assessed in terms of different measures of validity and reliability (Yin, 1994). In our study two types of validity are considered important: content validity and construct validity (Hair et al., 2007). Content (or face) validity refers to the extent to which a measure fits into different aspects/dimensions of a construct (De Vaus, 2002). To assure the consistency of the responses, the finalized version of the questionnaire has been pre-tested to exclude problems regarding the clarity of the questions and to ensure that each question is relevant (Bagozzi and Yi, 1988). Based on the feedback received, some redundant and ambiguous items were modified or eliminated. The two relevant aspects of the construct validity are convergent validity and discriminant validity. Convergent validity exists when the items of a measure are highly correlated. Discriminant validity addresses the question of whether two different constructs in the model are really distinct from one another (De Vaus, 2002). In this study, convergent and discriminant validity were assessed through a confirmatory factor analysis (Gerbing and Anderson, 1988). Principal components analysis was also employed. By using varimax rotation, a clear separation of constructs was obtained. In addition a Bartlett's test of sphericity was adopted to measure the intercorrelation among the variables. The degree of correlation among variables and the suitability of factor analysis was also calculated via a Kaiser-Meyer-Olkin (KMO) test, which measures the sampling adequacy for both the overall test and each individual variable. The last statistic was the percentage of variance; this is designed to achieve a specified cumulative percentage of total variance extracted by successive factors.

The following statistics were adopted to test the model fit: the Chi-square index, the normed fit index (NFI), comparative fit index (CFI) and the root mean square error of approximation (RMSEA). The Chi-square index tests the hypothesis whether an unconstrained specified model fits the covariance/correlation matrix as well as the given data. It should not be significant for a good model fit. A problem with this test is that the larger the sample size, the more likely becomes the rejection of the model. For this reason, the chi-square fit test (CMIN/DF) adjusting the chi-square index for the degrees of freedom, was also considered. Values as large as five are accepted as adequate fit, but more conservative thresholds are 2 or 3 (Arbuckle, 2007).

The NFI and CFI vary from zero to one and are derived from the comparison of the hypothesized model with the independent model. However, the NFI has a tendency to underestimate the model fit in small samples (Byrne, 2010) while CFI takes sample size into account.

The RMSEA incorporates a discrepancy function criterion (comparing observed and predicted covariance matrices) and a parsimony criterion; it should be less than or equal to 0.05 (0.08) for a good (adequate) model fit (Hu and Bentler, 1999).

3.2 Data collection and variables measurement

A survey was carried out through an on-line questionnaire. Twenty NGOs (16 Italian and 4 foreign) and six National and international bodies (FAO, IFAD, EU, CHIEAM, GTZ, Italian Ministry of foreign affairs) coordinating and/or financing International cooperation development projects in the agricultural sector have been contacted. The NGOs contacted represent organization which can be considered small enterprise in terms of size, given the fragmented nature of the Italian NGOs related to international cooperation development in agriculture (Italian NGO Association, 2011). A convenience sample was adopted; the country or region desk officers belonging to these organizations were contacted and asked to invite the teamwork members in different projects around the world to answer the on-line questionnaire. This indirect contact with the respondents was not avoidable, given the governance structure and rules of these organizations. Consequently it is not possible for us to know the number of projects actually contacted and the respondents' rate. Three questionnaires out 110 were excluded from further analysis because of considerable missing data. Consequently the sample size is 107. The data have

been collected in a 2 year period 2009-2010.

The Relations Sustainability and Organizational Climate have been first measured. Following the theoretical framework, the Relations Sustainability measure is based on 4 questions related to the existence of the following items: trust, commitment, satisfaction, and collaboration history (Fischer et al., 2010). The project members were asked to answer on the base of a 5-point Likert scale ranging from 1=Disagree to 5=Agree. The variable Organizational Climate is originally based on 26 items describing the five dimensions developed by Zeitz et al. (1997): job challenge, communication, trust, innovation, and social cohesion. The teamwork members were asked to answer questions related to these items using a 5-point Likert scale ranging from 1=Disagree to 5=Agree. The multiple items representing each of the dimensions are listed in Annex A. The questions were translated into Italian, French, Spanish and Portuguese from their original English version. Other questions identifying the respondents' social-demographic characteristics and the project structure and location were added. Given the methodological approach adopted the sample size was not large enough to break down the analysis at the regional level, taking into account relatively homogeneous cultural and geographic context.

4 Research findings

4.1 The sample statistics

Among the different questions related to the respondent's socio-demographic conditions and the projects' characteristics, only the activity sector (agriculture) and the area of the project (country) were answered. The data mainly originate from projects related to agricultural development, located in Africa and Latin America, but also Asia, even if to a lesser extent, is represented. Table 3 shows the geographical locations of the respondents. The most relevant areas of the developing world are considered.

Table 3.
Geographical distribution of projects

COUNTRY	N° OF TEAMWORKS
Southern America	32
Central America	7
Southern Africa	13
Eastern Africa	12
Central Africa	7
Northern Africa	7
Western Africa	7
Southern Asia	10
Western Asia	7
Southern Europe	5
TOT	107

4.2 Results for the measurement model

4.2.1 Validity and reliability

The Organizational Climate construct developed by Zeitz et al. (1997) was initially represented by the 5 dimensions above listed and the 26 items described in the questionnaire. Based on the content validity, 7 redundant and ambiguous items were removed and the remaining 19 items were analyzed. All the items defined by the questionnaire loaded on their respective factors with most loadings values above .70 (Table 5). The cumulative variance explained by the five factors is 67.11%, the Bartlett's test of sphericity is significant at $p < .000$ indicating that sufficient correlation exists among the variables; the KMO test value is .821; this indicates that the factorial model provide an adequate fit to the observed data. A factor analysis was conducted to analyze the relation sustainability; the above reported 4 items were considered (trust, commitment, satisfaction, collaboration history). One factor was extracted (Table 4). The cumulative variance explained by the factor is 70.33%, the Bartlett's test is significant at $p < .000$, the KMO test value is .757.

The reliability of Organizational Climate and Relations Sustainability was assessed adopting the Cronbach's Alpha. The reliability values for the constructs (dimensions) are all > .70; this can be

considered as acceptable. The only exception being the dimension "communication", whose reliability value is .605 (Table 5).

Table 4.
Factor analysis results for Organizational Climate

	Factors					Communalities	Reliability
	Job Challenge	Trust	Innovation	Social Cohesion	Communication		
JCH 2	.782					.690	.822
JCH 3	.781					.787	
JCH 4	.724					.694	
JCH 5	.659					.635	
JCH 1	.574					.673	
TRS 2		.810				.726	.783
TRS 3		.714				.658	
TRS 1		.655				.562	
TRS 4		.579				.496	
INN 3			.733			.805	.819
INN 1			.656			.695	
INN 4			.632			.552	
INN 2			.616			.716	
INN 5			.610			.497	
SCH 2				.854		.773	.797
SCH 1				.837		.748	
SCH 3				.738		.665	
COM 2					.749	.721	.605
COM 1					.698	.599	
% of variance	15.516	15.486	14.885	11.760	9.459		
Cumulative % of variance	15.516	31.033	44.888	57.468	67.107		

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Table 5.
Factor analysis results for Relations Sustainability

	Factor	Communalities	Reliability
Satisfaction	.924	.854	.856
Trust	.888	.789	
Commitment	.775	.570	
Col. History	.755	.600	
% of variance	70.326		

Extraction Method: Principal Component Analysis.

Table 6 shows the means and correlations among dimensions of Organizational Climate and Relations Sustainability. All the standardized coefficients are significant. Most of them show a p value < 0.001

Table 6.
Means and correlations related to Organizational Climate dimensions and Relations Sustainability describing variables

	Variables	Mean	1	2	3	4	5	6
1.	Innovation	4.839	-					
2.	Trust	5.104	.684***	-				
3.	Social Cohesion	4.509	.294***	.412***	-			
4.	Communication	3.780	.680***	.472***	.455**	-		
5.	Job Challenge	4.957	.478***	.642***	.300**	.378***	-	
6.	Relations Sustainability	5.344	.634***	.589***	.266**	.596***	.386***	-

*** Correlation is significant at the 0.001 level (two-tailed)
** Correlation is significant at the 0.01 level (two-tailed)
* Correlation is significant at the 0.05 level (two-tailed)

4.2.2 Validation of second-order construct

Organizational Climate was conceptualized as a second-order model defined by five dimensions. Structural equation modeling was used to determine whether a higher-order factor model is appropriate for these constructs. The results confirm our analytical approach; all the measurements items showed significant loadings to their corresponding second-order dimensions. The β coefficients were all significant at $p < .001$. The model performs well and the following values fall within the expected range: Chi-square = 219.931, df. = 147, p = .000; CMIN/DF = 1.496; RMSEA = .068; NFI = .787; CFI = .914.

4.3 Results for the structural model

The path diagram resulting from the structural modeling analysis using AMOS 7.0 (Figure 2), based on our theoretical framework, showed a causal connection between the variables Organizational Climate and Relations Sustainability. Table 7 reports the statistics related to the model properties: regression weigh (RW), standard error (SE), critical ratio (CR), standard weight (SW) and the level of significance as determined by the p-value for hypothesized relationship. Overall, the model fit is moderate: Chi-square = 330.860, df. = 224, p = .000; CMIN/DF = 1.477; RMSEA = .067; NFI = .768; CFI = .907.

The analysis of the structural model indicates that all the relationships among the model variables are highly significant ($p < .001$). Furthermore, different R^2s result high; of particular interest is the value of R^2 related to the influence of Organizational Climate on Relations Sustainability ($R^2 = 0.52$).

Table 7.
The structural model results

			RW	SE	CR	SW	P
Innovation	<---	Organizational Climate	1.000			.835	
Social Cohesion	<---	Organizational Climate	.667	.200	3.339	.427	***
Communication	<---	Organizational Climate	1.237	.251	4.930	.718	***
Trust	<---	Organizational Climate	1.153	.226	5.107	.843	***
Job Challenge	<---	Organizational Climate	1.076	.226	4.769	.623	***
Relations Sustainability	<---	Organizational Climate	1.105	.191	5.774	.722	***
JCH 5	<---	Job Challenge	1.000			.741	
JCH 4	<---	Job Challenge	1.093	.126	8.670	.857	***
JCH 3	<---	Job Challenge	1.077	.121	8.925	.892	***
JCH 2	<---	Job Challenge	.496	.092	5.400	.543	***
JCH 1	<---	Job Challenge	.454	.109	4.175	.423	***
INN 1	<---	Innovation	1.000			.782	
INN 2	<---	Innovation	1.335	.140	9.503	.852	***
INN 3	<---	Innovation	1.551	.154	10.052	.898	***
INN 4	<---	Innovation	1.141	.165	6.906	.653	***
INN 5	<---	Innovation	.517	.160	3.229	.323	.001
SCH 3	<---	Social Cohesion	1.000			.728	
SCH 2	<---	Social Cohesion	1.156	.175	6.609	.821	***
SCH 1	<---	Social Cohesion	.865	.135	6.408	.728	***
TRS 4	<---	Trust	1.000			.645	
TRS 3	<---	Trust	1.270	.202	6.293	.786	***
TRS 2	<---	Trust	1.015	.170	5.971	.723	***
TRS 1	<---	Trust	.906	.172	5.264	.621	***
COM 2	<---	Communication	.682	.170	4.014	.569	***
COM 1	<---	Communication	1.000			.765	***
TRU	<---	Relations Sustainability	1.000			.882	
COMM	<---	Relations Sustainability	.667	.088	7.576	.645	***
SAT	<---	Relations Sustainability	1.160	.085	13.706	.951	***
COL	<---	Relations Sustainability	.810	.106	7.658	.648	***

*** Correlation is significant at the 0.001 level (two-tailed)
** Correlation is significant at the 0.01 level (two-tailed)
* Correlation is significant at the 0.05 level (two-tailed)

Specific details on the relationship indicators are contained in Table 6. The correlations coefficients show a strong relationship among all the latent variables considered in the model, especially innovation, trust, communication, and relations sustainability. All regression coefficients are highly significative ($p < .001$) and the model fit statistics perform well (Table 8). Only the NFI fit index doesn't meet the minimum value. However this index tends to underestimate the fit for samples less than 200 (Mulaik et al, 1989). To overcome this drawback the CFI index was adopted; it is a revised NFI index which takes the sample size into account. CFI has been chosen in the present paper following other authors' advice (Bentler, 1990).

Table 8.
Standardized measurement model fit

Property	Recommended value	Value
CMIN/DF	≤ 3.00	1.477
NFI	≥ 0.90	0.768
CFI	≥ 0.90	0.907

RMSEA	≤ 0.08	0.067

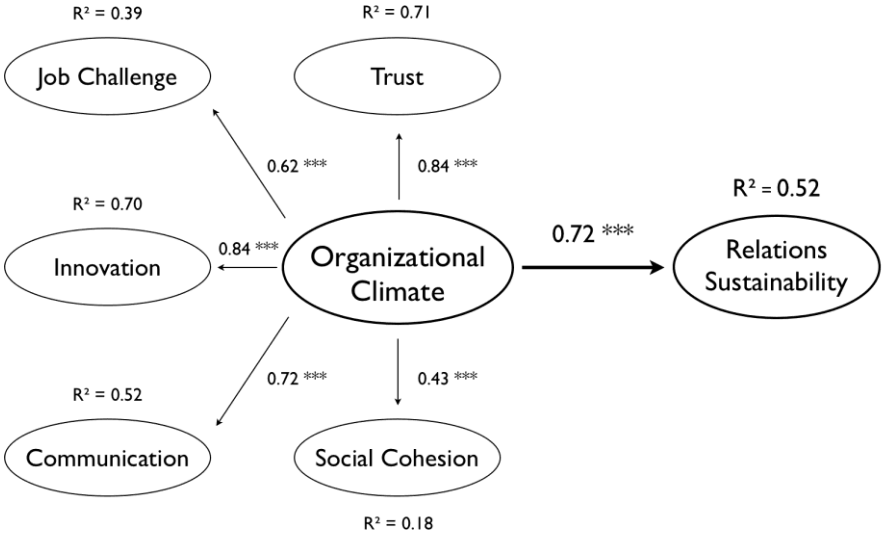

Figure 2. Path model for the structural analysis

The left side of the path diagram causal connections (Figure 2) shows the dimensions defining the latent variable Organizational Climate. In particular the dimension of Innovation (INN) shows a strong role in defining the Organizational Climate (β = 0.84; R^2 = 0.71). Innovation, in turn, is defined by three categories of specific items. The first category relates to the positive role played by the encouragement from the project manager to the project team in displaying a pro-active attitude, like submitting suggestions (INN 1) or acting in order to improve the individual's contribution to the team job quality (INN 2); the second category (INN 3) relates to the project manager request of inventiveness and a last category of items (INN 4, INN 5) relates to the adoption of incentives for the team members, integrating and reinforcing the project manager efforts towards obtaining a pro-active participation to the project implementation from the team members.

Trust (TRS) is another dimension strongly related to the definition of the Organizational Climate (β = 0.84; R^2 = 0.71). In turn Trust is defined by the team members' awareness of their role (TRS 1) and the project manager's trust on the team capacity to efficiently implement their tasks (TRS 2). Trust also involves the project manager capacity of putting the team members at ease, and frankly discuss their problems with him without fear of reprisal (TRS 3).

The Social cohesion (SCH) dimension's role in defining the Organizational Climate is relatively weaker (β = 0.43; R^2 = 0.18) when compared to Innovation and Trust. Anyway Social cohesion is in turn defined by horizontal relations, in specific the team members' positive attitude towards working together (SCH 1), their sense of belonging (SCH 2) and the awareness of the group's shared commitment to the project (SCH 3).

Organizational Climate is positively and strongly defined by the dimension Communication (COM) between project manager and teamwork and among the teamwork members (β = 0.72; R^2 = 0.52). In specific Communication is defined by the capacity of the project manager to communicate with the team members (COM 1) and also by the level of communication among the teamwork members (COM 2).

The Job Challenge dimension (JCH) less strongly defines Organizational Climate (β = 0.61; R^2 = 0.37). In turn Job Challenge is defined by four variables indicating the attitude of the team workers towards the challenges posed by the project. In general the team workers seem positively stimulated by the presence of challenges in the project (JCH 4) and by the quality and novelty of the skills and talent involved (JCH 3). The necessity to use a variety of different skills and talents (JCH 2,) seems to be relatively less influential. A reverse code variable, adopted to verify the previous answers, confirmed the existence of a positive influence of job challenges on the project capacity to stimulate the workers' full involvement; in fact their job assignment have been considered not boring and repetitive (JCH 5).

Overall, the Organizational Climate positively and strongly influences the Relation Sustainability.

Looking at the right side of the path diagram (Figure 2) the model also measures the contribution of the four interpersonal relations characteristics defining the latent variable Relation Sustainability, that is their role in reinforcing the teamwork members' relationship within the project. The most important characteristics include the teamwork members' satisfaction (SAT) in working with a project manager able to fulfill their needs and their trust (TRU), expressed in terms of the project manager capacity to meet their expectations. Commitment (COMM) is less contributing to the Relations Sustainability definition and is expressed in terms of team workers' belief that the existing relationship is of great importance for the project and is supported by a co-operative attitude. Finally the Collaboration history (COL), results in positively defining the Relations Sustainability; in particular all the experiences made with the project manager in the past resulted of paramount importance in defining their attitude and behavior towards the project manager.

5 Discussion and conclusion

The study provides evidence supporting the hypothesis that Organizational Climate influences Relations Sustainability between the teamwork and manager involved in international cooperation projects for agricultural development. Using an existing set of items defining the second-order construct of Organizational Climate the structural model proposed in this paper confirms the work of Zeitz et al. (1997). It also confirms another study stating that Relations Sustainability is defined by trust, commitment, satisfaction and collaboration history (Fischer et al., 2010). The results of our study comply also with other works more specifically oriented to the project management (Zaccaro et al., 2001; Hoegl and Gemuenden, 2001); they underline the positive influence of communication, social cohesion, trust and cooperation among the teamwork members on the sustainability of their relations with the project manager.

Our results provide a first detailed description of the role of Organizational Climate within the international cooperation projects in agriculture. It provides a useful analytical tool for evaluating the quality of the relations among its members and a normative tool able to support the managers in their choice of the most effective Organizational Climate. With respect to the organization culture the present paper suggests that the Relations Sustainability can be positively influenced by implementing a *Task Culture* within the projects, as defined by Handy (1999) where the teamwork's members feel free to express their skills in a stimulating and non strictly hierarchical environment.

In conclusion the items describing the above mentioned dimensions will contribute to support project managers, NGO's and institutions in effectively managing the relations within the project. By understanding the role of Organizational Climate within projects, managers can improve the Relations Sustainability, and consequently the project success, by creating trust, stimulating commitment and generating satisfaction by overcoming conflicts among teamwork members.

The main problems met in the present analysis are related to the difficulty in involving the respondents, resulting in a relatively small sample and poor information on the teamwork and, in general, on the project background. In our opinion the main obstacles have been related to a relatively difficult communication between the researchers' and the local teamwork. Distributing a questionnaire worldwide, often in remote areas, and the indirect contacts with the respondents could be one possible cause.

This implies the necessity to create conditions for a more effective involvement of the respondents. Some sort of compensations, or specific agreements with the respondent's organizations, could help. This is particularly relevant since, according to the theoretical framework described the Organizational Climate is influenced by others variables, like Human Resource Management strategies, Psychological Contract and many other external context-related factors (Zanasi and Rota, 2009). Further researches should include these variable in the SEM model; a larger sample is required to this end, making the definition of effective respondents' involvement strategies, together with a more detailed questionnaire design, a central one.

Annex A

Organizational Climate questionnaire.
Consider the working environment of the project's teamwork. To what extent do you agree or disagree to the following statements?

Job Challenge

- JCH 1 - The job requires me to use a number of complex or high-level skills
- JCH 2 - The job requires me to do many different things at work, using a variety of skills and talents.
- JCH 3 - I have new and interesting things to do in my work.
- JCH 4 - My work challenges me.
- JCH 5 - The job is quite simple and repetitive.

Communication

- COM 1 - The present project manager does a good job of communicating with teamwork's members.
- COM 2 - There is poor communication between teamwork's members.

Trust

- TRS 1 - I know exactly what is expected of me.
- TRS 2 - The present project manager shows complete trust in teamwork members' abilities to perform their job well.
- TRS 3 - I feel free to discuss problems or negative feelings with the project manager.
- TRS 4 - Within reason, people in this teamwork can say what they want without fear of criticism.

Innovation

- INN 1 - Teamwork's members are encouraged to make suggestions for improvements in their work.
- INN 2 - Teamwork's members are encouraged to try new and better ways of doing the job.
- INN 3 - Creativity is actively encouraged in this project.
- INN 4 - Innovators (those who come up with new ways of doing things) are the people who get rewarded in this project.
- INN 5 - Trying new ways of solving problems is discouraged here.

Social cohesion

- SCH 1 - People in teamwork enjoy working with their co-worker.
- SCH 2 - Co-workers in teamwork are like a family.
- SCH 3 - I trust my co-workers to do what is in the best interests of the project.

Relations Sustainability questionnaire.
Please rate this relationship on scale from 1 (very poor) to 5 (very good)

- TRU - My trust in the present project manager
- COMM - My commitment towards the present project manager
- SAT - My satisfaction with the present project manager
- COL - My past collaboration experience with the present project manager

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