

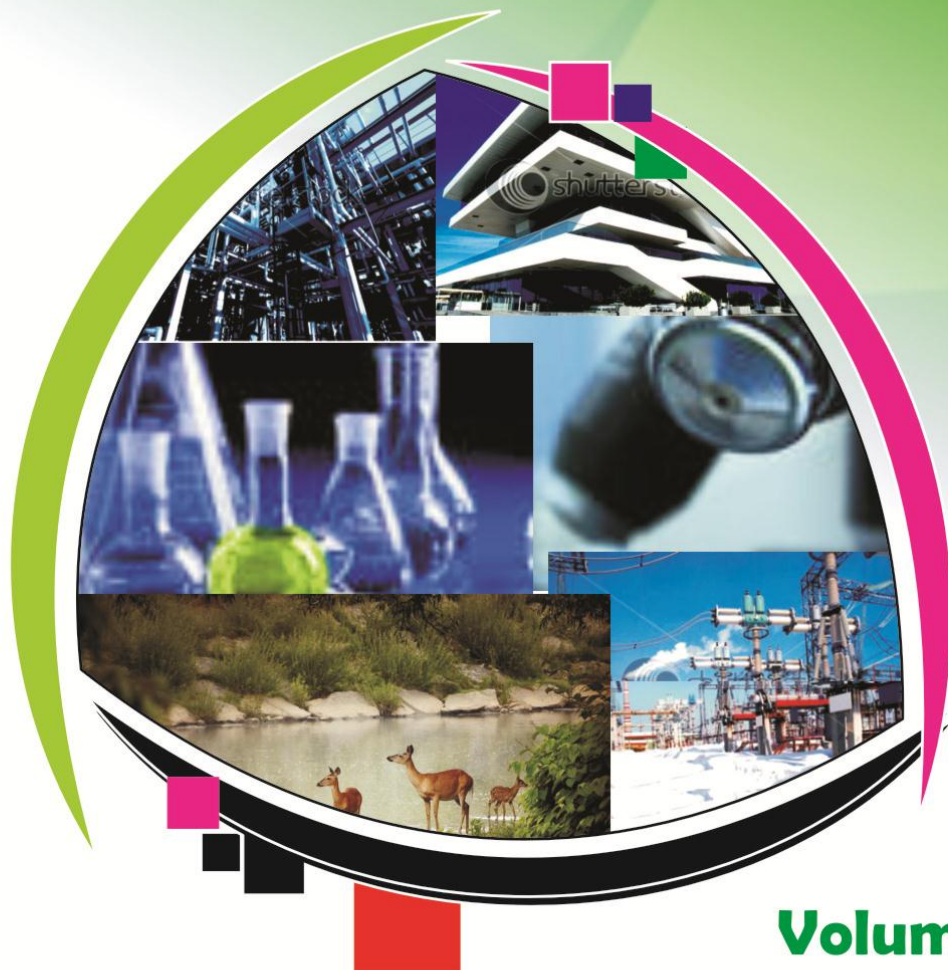


9<sup>th</sup>

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**Volume 3**

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## PREFACE

The University of Lagos recognizes the importance of collaboration between the industries as well as all stakeholders in education and research. Considering the state of human resource and infrastructure in developing society and industry at this stage of our national development; the theme for the 9<sup>th</sup>UNILAG Annual Research Conference and Fair is **Health, Infrastructure and Development**.

Infrastructure is the basic framework for delivering energy, transport, water and sanitation as well as information and communication technology services to people. This directly or indirectly affects people's lives everywhere. That relationship is reflected in the Millennium Development Goals (MDGs). Yet only two MDG targets touch on infrastructure services: water and sanitation (target 7C) and telephones and the Internet (target 8F); energy and transport are missing entirely. And no goal or target addresses the comprehensive role of infrastructure in achieving the MDGs. The 9<sup>th</sup>UNILAG Annual Research Conference and Fair is set to fix the missing link.

The conference will provide: a forum for researchers, practitioners in industry and policy makers to share ideas on infrastructure as it affects the health and development of our nation. The major sub-themes of the conference have been divided into five main topics for presentation as plenary lectures as well as arranged submitted abstracts into these major subthemes for parallel oral presentations.

The Keynote Address is to be delivered by the custodian of the nation's health in the person of **Prof. Onyebuchi Chukwu, Minister of Health**. The plenary lectures are also to be delivered by experts in the various fields:

Speaker	Topic
Pharm. Richard Iweanoge, General Manager (Sales Channels) MTN Communications Nigeria	Communication, Technology, Energy and Health: Correlations & Implications
Dr. Rui Gama Vas, World Health Organization Representative in Nigeria	The Public, Community Health and Development: Correlations for Survival
Prof. Olubunmi E. Olapade-Olaopa, Dept. of Surgery, University College Hospital, Ibadan	Curriculum and Production of Knowledge: Implications for Development
Dr. (Mrs.) Gloria N. Elemo – Director General/CEO, Federal Institute of Industrial Research Oshodi, (FIIRO)	Nano-Science and Health: the State of the Nation
Barr. Remi Ogunmefun - Director General, Manufacturers Association of Nigeria	Infrastructure, Manufacturing, Socio-Economic Factors and Security: The implications to Health

Research infrastructures play a crucial role in making all these happen and I am very pleased that this conference is putting the dimension of research infrastructures high.

A total of 287 submissions of which there are 129 full papers, the other 158 are mainly abstracts whose research details are to be featured by the authors as Poster Presentations. Authors of the 129 full papers are slated for Oral Presentations to run concurrently in the five (5) parallel sessions.

The following publications are available for participants:

1. A book of Abstracts containing all accepted abstracts submitted (287), including the abstracts of accepted full papers, made available to all registered participants.
2. Three (3) Volumes of Books of Conference Proceedings:

Volume 1 for Humanities: 35 Papers from the Faculties of Arts, Business Admin, Education, Law and Social Sciences

Volume 2 for Medical Sciences: 39 Papers from the Faculties of Basic Medical Sciences, Clinical sciences, Dental Sciences and Pharmacy.

Volume 3 for Sciences: 55 Papers from the following Faculties; Engineering, Environmental Sciences and Science.

These 3 volumes have been produced both in print and in soft copy as Pdf format burnt on CDs. The CDs are provided for all registered participants while the hard copy print is to be made available on request at a minimal cost.

Worthy of note is the high profile and expertise of the participants from across the nation. So there is no doubt that the presentations and discussions will be very stimulating. Experts and stakeholders will also make specific recommendations on research infrastructures to respond to societal challenges.

Sincere appreciation to the University of Lagos for continued support in sustaining the research conference over the years and the Conference Planning Committee (CPC) for their untiring efforts.



**Professor Olukemi A. Odukoya** FPSN  
Chairperson  
9<sup>th</sup> UNILAG Conference Planning Committee

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# EFFECTS OF PROJECT MANAGEMENT ON ABANDONMENT OF BUILDING PROJECTS IN LAGOS STATE, NIGERIA

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## **ABSTRACT**

*The study was conducted to investigate the roles of project management on building projects in Lagos, Nigeria. The objectives of the study are to determine the project management factors responsible for project abandonment, effects of poor project management on construction projects and the ways of reducing project abandonments in Lagos state. The study made use of 66 questionnaires out of the 80 that were administered on project managers within Lagos metropolis. The project managers of selected public and private abandoned projects were used for the study and the results of the study were analyzed with SPSS software using percentages and mean scores. The results of the study show that 15 project management factors lead to project abandonments to a high extent while another 15 lead to project abandonments to an average extent. The effects of poor project management on construction project abandonments and stakeholders include conflicts, loss of economic value and reduced standard of living. Project abandonment could be reduced by adequate planning, use of competent professionals and standard project management procedure. The conclusion of the study is that poor project management is key to construction project abandonments and to prevent project abandonment, the study recommends that project managers must engage in adequate planning, cost control and resource management.*

**Keywords:** *Abandonment, Building project, Lagos, Project manager, Project management*

## **INTRODUCTION**

The influence of project management on building project abandonment in Nigeria cannot be underestimated as it has grave consequences on the stakeholders (clients, consultants, contractors and users) and the nation at large. The menace of missed project objectives such as schedule and cost target overrun with distressing regularity and backlog of projects waiting to be tackled have largely characterized the Nigerian construction industry. These occur as a result of many unidentified factors (including poor project management) which eventually lead to building projects being abandoned. Unless the factors influencing project abandonments in Nigeria are identified, the statistics of failed projects will likely continue to be on the increase.

While project management was described to involve an array of carefully planned, interrelated and organized effort directed towards the accomplishment of project objectives (Young, 2006), Project abandonment was explained as the decision of management, for whatever reason to temporarily or permanently discontinue a project under development or currently in operation (Ewusi-Mensah & Przasnyski, 1991). Henachor (2012) explained that abandonment is an act of giving up on something completely, with no certain intention of when to resume. It was noted in Olusegun and Michael (2011) that there are about four thousand (4000) uncompleted or abandoned projects which belong to the Federal Government of Nigeria with an estimated cost of over N300 billion which will also take thirty (30) years to complete at the current execution capacity of the government.

Many factors have been traced to abandonment of construction projects. Yeo (2002) discovered that hostile company culture, political pressure, improper reporting structure, influences, vested interest and inappropriate level of management commitment are the organizational and managerial causes of project abandonment. Ewusi-mensah and przasnyski (1991) highlighted staffing, managerial and communication aspect of project management as the causes of project abandonment. Keider (1984), in his study concluded that although some projects are abandoned as a result of technology or design problems, the main reason behind project abandonment is a lack of understanding of the influence of project management on construction projects thereby leading to project abandonment. Other causes of project abandonment include – lack of social analysis of a project, project imposition, improper financial analysis, under bidding of project and lack of technical analysis (Henachor, 2012). Aluko (2012) asserted that contractors' bankruptcy, variation of project scope and incompetent project managers are responsible for project abandonment in Nigeria.

Abandonment of construction projects as a result of these factors has had devastating effects on both the projects and its stakeholders. Olusegun and Michael (2011) declared that project abandonment leads to the disappointment of the populace, low standard of living, wastage of resources, reduction in employment opportunities, decrease in economic activities, decrease in revenue accruing to government, difficulties in attracting foreign loans and increase in final cost of the project. Carrero, Malvarez, Navas and Tejada (2009) described the impacts of an abandoned project as both socio-economic and environmental. Henachor (2012) opines that project abandonment has its effect on individual, community and the government.

Since project abandonment has been attributed to poor project management (Al-Ahmed, Al-fagih, Khanfar, Alsamara, Abulal Abu-Salam, 2009), it is important to work towards preventing its occurrence by identifying the project management factors responsible for project abandonment, the effects of project abandonment in the construction industry and the strategies that can be used to avoid project abandonment. Against this background therefore, the study intends to investigate the project management factors responsible for project abandonment, determine the effects of poor project management on construction projects and examine ways of preventing project abandonments caused by poor project management.

From the literature used for this study, it can be observed that there are many factors that are responsible for abandonment of construction projects and project management related factors are on all the lists. Therefore, if the project management related factors could be eliminated, project abandonment related factors could be eliminated; project abandonment will be reduced to a bearable minimum. El-Eman and Koru (2008) claimed that project abandonments are not always bad as they can lead to substantial learning and produce artifacts that are applicable to future projects. This notion was supported by Ewusi-Mensah and Przarnyski (1991) when it was stated that project abandonment in itself may be a good and acceptable management practice because it may prevent further investment of scarce organization resources in a non-productive venture. On the other hand however, El-Elam and Koru (2008) stated that project abandonment was corporate resources and is often difficult to deal with because it requires special management skills and critical business decisions.

Various effects have been highlighted by authors as a result of poor project management and abandonment of project. Carrero, Malvarez, Navas and Tejada (2009) established that project abandonments have both socio-economic and environmental impacts.

The effects identified by Olusegun and Michael (2011) are disappointed of the populace, reduced standard of living, wastage/under utilization of resources, reduction of employment

opportunities, decrease in tempo of economic activities, decrease in revenue accruing to government and difficulties in attracting foreign loans. Henachor (2012) noted that the effects of poor project management are felt by the individuals, community and government.

Many of the authors that worked on the factors and effects of project management and abandonment of projects actually suggested solution to the problems. This is evident in the works of Lemon, Liebowitz, Burn and Hackney (2002) when they suggested that project abandonments can be cured by extension of project schedule, better project management procedures, addition of more people, increased funding, increasing pressure on suppliers, reduced scope of project, request for outside help, better development methods, changed technology and performing some other functions.

The solutions of Olusegun and Michael (2011) are adequate planning inception, making fund available, engage competent construction professional, production of economic designs, project scope should not be varied, prompt payment to contractor, partnering, risk appointment, risk review, clear communications, root cause analysis, maintaining morale and right culture and keeping register of uncertainty, government should reduce inflation, previously started jobs should not be abandoned for new idea and strong financial based contractors should be employed. Henachor (2012) took a multi-dimensional approach by suggesting social analysis, institutional analysis, financial analysis, economic analysis and technical analysis to solve the problem of project abandonment.

In addition, Boehm (2001) suggested that project abandonment can be avoided by conducting user satisfaction and needs survey, holding internal technology fairs, ensuring sustained user involvement in product definition, project reviews and studying clearing that unanticipated changes might make it advisable to terminate or redirect the project.

## **METHODS**

This study is both survey and descriptive in nature and involves the assessment of selected abandoned projects through the use of structured questionnaire and interview for data collection. Since construction projects fall into different categories such as building, civil and heavy engineering amongst others, the study focuses on building (residential, industrial, institutional and recreational) projects within the Lagos metropolis. Any construction related professional such as Architect, Builder, Estate Surveyor and Valuer, Quantity Surveyor or Engineer would make a good project manager provided there is requisite knowledge, experience of the industry and ability to lead and co-ordinate (Odusami, Omirin & Iyagba, 2003). Hence, the population of this study consists of abandoned projects (public & private) that are carried out by construction related project managers.

The sample for this study consists of public and private abandoned building projects within Lagos metropolis. The projects used for the study were selected through convenience sampling (Non-probabilistic) technique. The construction project managers that worked on the selected public and private abandoned building projects within Ikeja local government area are the subjects for this study.

Project management experts were interviewed in order to shed more light on the subject of the study. The project managers have a minimum of fifteen years work experience and have been engaged on an array of building projects which include residential, institutional, recreational and religious buildings. The academic background of the professionals involved in the interview is basically M.Sc but some of them still hold Bachelor's degree. The responses of the interviewees were tape recorded and replayed after the interviews have been completed to extract important

comments that are useable for results and analysis. Tape recorder was used to prevent the interviewer from asking the interviewees to retake some statements, thereby disturbing the flow of information within the interview session.

Furthermore, the questionnaire for the study was initially administered on ten respondents in order to discover the weaknesses in it and make necessary corrections, additions and subtractions that are noted by respondents. However, the responses from the pilot study (10 respondents) was combined with those from the main respondents (51 respondents) during data analysis because the corrections made to the questionnaire were in the area of creating open ends for contributions from respondents rather than the contents of the questionnaire and correcting some spelling errors. Furthermore, the respondents for the pilot study were part of the sample for the study. The main statistical method employed for this study is the mean item score.

The project management factors that are responsible for abandonment of building projects are depicted in table 2. These factors which include lack of good project planning (4.35), inadequate cost control (4.30), poor resource management (4.15), wrong estimation (4.15), improper financial analysis (3.97), construction not following specifications (3.88), poor communication among project participants (3.76), improper documentation (3.73), improper definition of roles and responsibilities (3.65), poor risk management (3.53), misunderstanding of user requirements (3.47), lack of clear project goals and value (3.45), differences between management and client (3.45) and lack of commitment to project (3.45) are responsible for project abandonment to a high extent.

Also, insufficient management (3.42), lack of effective project management technique (3.42), lack of contingency plans (3.39), faulty designs (3.39), assignment of resources to a higher priority project (3.38), inadequate task definition (3.36), lack of management judgement (3.30), lack of training and over dependence on consultants (3.30), mis-used project management technique (3.27), over scheduling of experts (3.24), lack of user involvement (3.14), incomplete requirements (3.14), technology illiteracy (3.08), number of organizations involved in project (2.91) and lack of IT management (2.86) lead to project abandonment only to an average extent. Table 3 indicates the extent of the effects of building projects abandonment on construction projects and stakeholders in Nigeria. To that extent, wastage/underutilization of resources (3.85), conflicts (3.65), loss of economic value (3.62), visual effects (3.52) and marginalization of population (3.50) are the effects of poor project management that are experienced in Nigeria to a high extent.

Furthermore, reduced standard of living (3.41), pollution (3.39), decreased biodiversity (3.39), erosion (3.29), unemployment (3.29), landscape modification (3.17), disappointment of the populace (3.14) and difficulty in attracting loans (3.02) are effects of building projects abandonment that are experienced to an average extent in Nigeria.

Table 4 reveals the various ways that were suggested by respondents for preventing the occurrence of building projects abandonment in Nigeria. Thus, adequate planning at inception (4.58) and engaging competent construction professional (4.48) are very highly agreed to by the respondents as ways of reducing construction project abandonment in Nigeria. Also, standard project management procedure (4.29), clear communications (4.15), good development technique (4.06), increased funding (4.00), employment of strong financial base contractors (3.98), production of economic designs (3.97), economic and financial analysis (3.94), risk apportionment (3.91) and unvaried project scope were highly agreed to as ways of reducing abandonment of building projects in the Nigerian construction industry.

In addition, change of technology (3.88), risk review (3.82), root cause analysis (3.79), keep register of uncertainties (3.76), ensure sustained user involvement (3.76), conduct user satisfaction and need survey (3.73), maintaining good morale and right culture (3.71), extension of project schedule (3.68), previously started jobs should not be abandoned for new ideas (3.64), government should reduce inflation (3.52) and increasing pressure on suppliers (3.50) were highly agreed to by the respondents as ways of preventing project abandonment.

The effects of building projects abandonment from the interview conducted are basically:

(1) capital loss, (2) material waste, (3) promotion of illegal activities, (4) adverse effects on the community, (5) aesthetics, (6) decrease in the tempo of economic activities and the proffered solutions in addition to the existing ones are (1) inculcation of operational, strategic, personal, technological, marketing and environmental strategies to prevent financial predicament, (2) mandatory use of duly registered professionals and project management professionals, (3) constant training of organizations' staff involved in capital projects and (4) compulsory adoption of Building Information Modeling (BIM) for construction projects, (5) fairness, (6) accountability on the part of constructor, (7) honesty and integrity, (8) transparency, (9) establishment of National bank for the construction industry so that lending rates can be affordable.

## **DISCUSSION OF FINDINGS**

Many factors could lead to abandonment of building projects but the ones that are related to project management have been highlighted and rated in the order of their importance by the respondents of this study. The respondents believe that to a high extent, lack of good project planning, inadequate cost control, poor resource management, wrong estimation, improper financial analysis, construction not following specifications, poor communication among project participants, improper documentation, improper definition of roles and responsibilities, poor risk management, misunderstanding of user requirements, lack of clear project goals and value, differences between management and client and lack of commitment to project are responsible for abandonment of building projects in Nigeria. These factors are consistent with literatures in the area of lack of good project planning (Akindoyeni, 1989; Olusegun & Michael, 2011; Alfaadel, et al, ND; Lemon, et al, 2002), inadequate cost control, wrong estimation and improper documentation (Olusegun & Michael, 2011; McManus & Wood-Harper, 2007).

The study of Olusegun and Michael (2011) is also consistent with the findings of this study in the area of incompetent project manager and unqualified/experienced consultants while the poor management mentioned by Zairu and Rahinah (ND) is equally in consonance with the findings of this study. The results of Ewusi-Musah and Przasnyski (1991), Munns and Bjeirmi (1996), Liebowitz and Hackney (2002), El-Eman and Koru are in agreement with this study in the area of unsupportive top management, managerial and communication aspect of project management, wrong person as project manager and senior management not sufficiently involved in construction process. The mention of poor stakeholder's communication, poor competencies, poor risk management, lack of management support (McManus & Wood-Harper, 2007; Boehm, 2001), lack of clear project goal and value (Alfaadel, et al, ND), misunderstanding of user requirement and improper definition of roles and responsibilities (Schmidt, et al, 2001) are also findings that are consistent with the finding of this study.

However, the findings of Boehm (2001), Alfaadel, et al (ND), Schmidt, et al (2001), Lemon, et al (2002), El-Eman and Koru (2008) in the area of lack of user involvement, lack of IT management, technology illiteracy, complete and stable requirements, lack of training and critical quality problems with software as factors that can highly lead to project abandonment are

not very consistent with the findings of this study because they are rated only to an average extent as factors that can lead to project abandonment. Factors bothering on information technology, software and users' consent may not be of much weight in the Nigerian construction sector because most project managers appear to have ICT training and the lack of sufficient housing facilities may leave users with a few choices on the decency of accommodation even if they are not pleased with them.

Concerning the effects of project abandonment on construction projects and stakeholders, the findings of this study are very consistent with that of Carrero, et al (2009) in the area of wastage/underutilization of resources, conflicts, loss of economic value, visual impacts and marginalization of population as having high effect on project abandonments in Nigeria. Other effects such as reduced standard of living, pollution, erosion, unemployment and disappointment of the populace only have average effect on construction project abandonment in Nigeria.

Thus, according to this study, just as lack of planning is the most rated factor responsible for construction project abandonment, adequate planning at inception and engagement of competent construction professionals are rated highest as the ways of preventing construction project abandonment in Nigeria. In addition, standard project management procedure, clear communications, good development technique, increased funding, economic designs, risk management, user satisfaction survey and so on were also rated high as solutions to construction project abandonment in Nigeria. However, at the bottom of the list of solutions to construction project abandonment in Nigeria are partnering, holding internal technology fairs, requesting for external assistance, adding more people to projects and reducing scope of projects.

## CONCLUSION

The study concludes that apart from the non or poor execution of project managers roles, project management factors such as poor planning, inadequate cost control, poor resource management, wrong estimation, improper documentation and poor communication can also lead to construction project abandonment.

Based on this conclusion, the study recommends that project abandonment should be prevented by planning at inception, cost control, resource management, wrong estimation, financial analysis, constructing according to specifications, competent project manager, communications, proper documentation, risk management, understanding user requirement, clear project goal and value and commitment to project.

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**APPENDIX****Table 1: Project management factors responsible for abandonment of building projects**

Project management related factors	Mean	Extent of effect	Rank
Lack of good project planning	4.35	High extent	1
Inadequate cost control	4.30	High extent	2
Poor resource management	4.15	High extent	3
Wrong estimation	4.15	High extent	4
Improper financial analysis	3.97	High extent	5
Construction not following specifications	3.88	High extent	6
Incompetent project manager	3.88	High extent	7
Poor communication among project participants	3.76	High extent	8
Improper documentation	3.73	High extent	9
Improper definition of roles and responsibilities	3.65	High extent	10
Poor risk management	3.53	High extent	11
Misunderstanding of user requirement	3.47	High extent	12
Lack of clear project goals and value	3.45	High extent	13
Differences between management and client	3.45	High extent	14
Lack of commitment to project	3.45	High extent	15

5 = Very High Extent (VHE), 4 = High Extent (HE), 3 = Average Extent (AE), 2 = Low Extent (LE), 1 = Very Low Extent (VLE)

**Table 2: Effects of project management on construction project**

Effects	Mean	Extent of effect	Rank
Wastage/underutilization of resources	3.85	High extent	1
Conflicts	3.65	High extent	2
Loss of economic value	3.62	High extent	3
Visual effects	3.52	High extent	4
Marginalization of population	3.50	High extent	5
Reduced standard of living	3.41	Average extent	6
Pollution	3.39	Average extent	7
Decreased biodiversity	3.39	Average extent	8
Erosion	3.29	Average extent	9
Unemployment	3.29	Average extent	10

5 = Very High Extent (VHE), 4 = High Extent (HE), 3 = Average Extent (AE), 2 = Low Extent (LE), 1 = Very Low Extent (VLE)

**Table 3: Ways of preventing project abandonments**

Solutions	Mean	Level of agreement	Rank
Adequate planning at inception	4.58	Very high agreement	1
Engage competent construction professional	4.48	Very high agreement	2
Standard project management procedure	4.29	high agreement	3
Clear communications	4.15	high agreement	4
Good development technique	4.06	high agreement	5
Increased funding	4.00	high agreement	6
Strong financial base contractors should be employed	3.98	high agreement	7
Production of economic designs	3.97	high agreement	8
Social, institutional, financial, economic and technical analysis	3.94	high agreement	9
Risk apportionment	3.91	high agreement	10

5 = Very Highly agreed (VHA), 4 = Highly agreed (HA), 3 = Averagely agreed (AA), 2 = Low agreement (LA), 1 = Very Low agreement (VLA)