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Annexure-1
Model Questionnaire Form

.....
.....
.....
.....

Dear Sir,

Please fill the annexed questionnaire form for using the data collection of research on “Cost overrun on building projects on Contractor’s perspective” carried out by me at University of Moratuwa. Please send the duly filled questionnaire forms to my address mentioned below

Eng.K.Chandramohan,
Chief Engineer,
Dept. Of Buildings,
Inner Harbour Road,
Trincomalee

A self addressed stamped envelope is annexed herewith.



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Thanks for your co-operation and earliest response.

.....

Eng.K.Chandramohan,
Chief Engineer,
Dept. Of Buildings,
Inner Harbour Road,
Trincomalee

Questionnaire Form

Section – I- Details of Respondent

1. Organization Type (Government/Semi Government/Private):-.....
2. Title of respondent:-.....
3. Highest academic qualification of respondent:-.....
4. Working experience (in years):-.....
5. Contract Details:-
(if Desired only)
Telephone/Mobile:-
E-mail:-

Section- II Details of project University of Moratuwa, Sri Lanka.

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1. Name of the project
2. Location/ District:-
3. Procurement Method :- (Measure & pay/Lump Sum/Design & build/other specify)
4. Was project completed within awarding cost:- (Yes/No)
5. Initial awarding costs
6. Final cost:-
7. Date of awarding:-
8. Date of completion:-
9. Average floor area:-:-
10. No. of floor:-
11. Source of Funding:-
(GOSL/ Donor Funding/Private Funding)

Factors causing cost overrun	Not much significant	Low significant	Medium significant	Highly significant	Extremely significant
Factors related changes 01. Changes of scope 02. Cost due to extra work 03. Cost due to extra quantities 04. Changes in Design 05. Cost due to additional tests/site investigation other than mentioned in agreements 06. Cost due to acceleration of work 07. Cost due to omission & mistakes					
Factors related contract documents 08. Ambiguities or discrepancies in design/ estimates 09. Delay in issuing detail drawings					
Factors related project Management 10. Cost due to poor site management and planning 11. Cost due to the delay of the instructions/approvals of consultant/ Engineer 12. Low or unsound bid 13. Cost due to the delay in awarding of contract 14. Cost due to the delay in entering of agreement 15. Claims due to disputes between consultant and contractor					
Factors Related finance 16. Storage/ withdrawal of fund/imprest 17. Financial constraints of contractors 18. Price fluctuation of materials					

	<p>19. Price fluctuation of currency</p> <p>Factors related delays</p> <p>20. Suspension of works</p> <p>21. Delay in site possession</p> <p>22. Delay in obtaining special service connections</p> <p>23. Delay in obtaining test results</p> <p>24. Delay in payments</p> <p>25. Delay in obtaining permission/ permits for transporting materials</p>					
	<p>Factors related environment</p> <p>26. Changes in laws or govt. regulations</p> <p>27. Shortages of materials in market</p> <p>28. Cost due to adverse weather</p>					
	<p>Factors related defects</p> <p>29. Poor quality of work/Re work</p> <p>30. Rectification of defects due to accidents</p>					



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Section –IV Remedial measures

In Your opinion, what is the most suitable remedial measure to avoid cost over run?

K.Chandramohan.

ANEXURE 2 – Summarisation of data obtained in data collection

Factors causing cost overrun	Form No:1	Form No:2	Form No:3	Form No:4	Form No:5	Form No:6	Form No:7	Form No:8	Form No:9	Form No:10
Factors related changes										
01. Changes of scope	4	3	4	1	4	1	4	3	3	4
02. Cost due to extra work	4	4	4	2	3	2	3	3	3	3
03. Cost due to extra quantities	3	4	4	2	4	2	4	3	3	3
04. Changes in Design	4	3	4	2	4	2	4	4	4	4
05. Cost due to additional tests/site investigation other than mentioned in agreements	4	2	2	2	2	5	3	2	1	3
06. Cost due to acceleration of work	3	1	3	4	4	4	4	2	2	2
07. Cost due to omission & mistakes	4	1	3	4	4	4	4	3	3	4
Factors related contract documents										
08. Ambiguities or discrepancies in design/ estimates	5	2	3	2	2	2	2	3	2	2
09. Delay in issuing detail drawings	5	2	3	1	1	2	1	2	3	1
Factors related project Management										
10. Cost due to poor site management and planning	5	2	2	2	3	3	3	3	2	2
11. Cost due to the delay of the instructions/approvals of consultant/ Engineer	4	2	2	2	3	3	3	2	3	2
12. Low or unsound bid	4	2	1	3	4	4	4	2	2	1
13. Cost due to the delay in awarding of contract	5	1	2	3	5	4	5	3	2	3
14. Cost due to the delay in entering of agreement	5	1	1	3	5	4	5	3	2	3
15. Claims due to disputes between consultant and contractor	5	1	2	3	5	4	5	4	3	4

Factors Related finance										
16. Storage/ withdrawal of fund/imprest	4	2	4	2	2	2	2	4	4	3
17. Financial constraints of contractors	5	2	3	2	4	2	4	5	4	4
18. Price fluctuation of materials	5	2	4	3	3	3	3	5	5	5
19. Price fluctuation of currency	3	2	4	3	3	3	3	5	5	5
Factors related delays										
20. Suspension of works	5	3	2	4	4	3	4	1	2	3
21. Delay in site possession	5	2	2	4	4	3	4	2	3	3
22. Delay in obtaining special service connections	4	2	2	3	4	3	4	2	2	3
23. Delay in obtaining test results	4	2	2	2	3	2	3	1	3	2
24. Delay in payments	4	3	4	2	2	2	2	3	4	4
25. Delay in obtaining permission/ permits for transporting materials	4	2	3	2	2	2	2	2	2	3
Factors related environment										
26. Changes in laws or govt. regulations	5	2	3	2	2	4	2	2	3	2
27. Shortages of materials in market	5	3	4	2	2	4	2	3	4	2
28. Cost due to adverse weather	5	2	5	2	4	4	4	4	4	4
Factors related defects										
29. Poor quality of work/Re work	5	2	4	4	4	4	4	3	2	3
30. Rectification of defects due to accidents.	4	3	2	4	4	4	4	2	2	3

Factors causing cost overrun	Form No:11	Form No:12	Form No:13	Form No:14	Form No:15	Form No:16	Form No:17	Form No:18	Form No:19	Form No:20
Factors related changes										
01. Changes of scope	3	1	4	4	3	1	1	1	1	1
02. Cost due to extra work	3	2	4	4	4	2	2	1	1	3
03. Cost due to extra quantities	3	1	4	4	4	1	1	1	1	3
04. Changes in Design	2	1	3	2	3	2	4	1	1	2
05. Cost due to additional tests/site investigation other than mentioned in agreements	1	1	2	2	2	1	5	1	1	1
06. Cost due to acceleration of work	1	1	2	3	2	1	1	4	1	1
07. Cost due to omission & mistakes	1	1	2	2	2	2	2	5	5	1
Factors related contract documents										
08. Ambiguities in design/ estimates						1	1	1	1	1
09. Delay in issuing detail drawings	2	1	2	2	3	2	2	5	5	1
Factors related project Management										
10. Cost due to poor site management and planning	2	1	1	1	3	5	5	1	1	1
11. Cost due to the delay of the instructions/approvals of consultant/ Engineer	2	1	2	2	3	3	3	3	3	1
12. Low or unsound bid	2	1	1	1	2	1	1	1	1	1
13. Cost due to the delay in awarding of contract	2	1	2	3	2	3	3	1	1	1
14. Cost due to the delay in entering of agreement	2	1	2	3	2	1	1	1	1	1
15. Claims due to disputes between consultant and contractor	1	1	2	2	4	1	1	5	5	1

Factors Related finance											
16. Storage/ withdrawal of fund/imprest	3	1	3	3	4	1	1	4	4	1	
17. Financial constraints of contractors	3	1	2	3	3	2	2	2	2	1	
18. Price fluctuation of materials	3	1	2	3	3	1	1	1	1	2	
19. Price fluctuation of currency	3	1	2	3	3	4	4	5	5	1	
Factors related delays											
20. Suspension of works	2	1	1	2	2	4	4	1	1	3	
21. Delay in site possession	2	1	2	2	2	3	3	1	1	1	
22. Delay in obtaining special service connections	2	2	2	2	2	1	4	1	1	1	
23. Delay in obtaining test results	1	1	1	2	2	5	5	1	1	1	
24. Delay in payments	3	2	2	4	4	1	1	5	5	1	
25. Delay in obtaining permission/ permits for transporting materials	3	1	2	2	2	2	2	5	5	1	
Factors related environment											
26. Changes in laws or govt. regulations	2	1	2	2	3	1	1	1	1	1	
27. Shortages of materials in market	3	1	2	3	4	1	1	1	1	1	
28. Cost due to adverse weather	3	2	2	5	4	1	1	1	1	1	
Factors related defects											
29. Poor quality of work/Re work	2	1	2	2	3	1	1	1	1	1	
30. Rectification of defects due to accidents.	2	2	2	1	3	5	5	1	1	1	

Factors causing cost overrun	Form No:21	Form No:22	Form No:23	Form No:24	Form No:25	Form No:26	Form No:27	Form No:28	Form No:29	Form No:30
Factors related changes										
01. Changes of scope	3	1	1	1	2	2	2	1	1	4
02. Cost due to extra work	3	1	2	3	1	3	2	5	1	5
03. Cost due to extra quantities	2	1	1	3	2	3	2	1	1	5
04. Changes in Design	2	1	1	2	2	2	2	2	1	3
05. Cost due to additional tests/site investigation other than mentioned in agreements	3	1	1	1	1	1	1	1	1	2
06. Cost due to acceleration of work	3	1	1	1	1	2	1	1	1	2
07. Cost due to omission & mistakes	3	1	2	1	1	1	1	4	1	1
Factors related contract documents										
08. Ambiguities or discrepancies in design/ estimate	2	1	2	2	1	1	2	1	5	2
09. Delay in issuing detail drawings	2	1	2	2	1	1	2	1	1	2
Factors related project Management										
10. Cost due to poor site management and planning	1	1	2	1	1	2	1	5	2	1
11. Cost due to the delay of the instructions/approvals of consultant/ Engineer	1	1	2	1	1	2	1	5	1	1
12. Low or unsound bid	1	1	1	1	1	1	1	4	1	1
13. Cost due to the delay in awarding of contract	1	1	2	1	1	1	2	4	1	1
14. Cost due to the delay in entering of agreement	2	1	1	1	1	1	2	1	1	1
15. Claims due to disputes between consultant and contractor	1	1	1	1	1	1	1	1	1	1

Factors Related finance										
16. Storage/ withdrawal of fund/imprest	1	1	3	1	1	2	2	2	5	1
17. Financial constraints of contractors	1	1	2	1	1	2	2	2	4	1
18. Price fluctuation of materials	1	1	1	1	2	1	2	2	5	1
19. Price fluctuation of currency	1	1	1	1	1	1	2	2	5	1
Factors related delays										
20. Suspension of works	1	1	1	1	1	1	1	4	1	1
21. Delay in site possession	1	1	1	1	1	1	1	4	1	1
22. Delay in obtaining special service connections	1	1	1	1	1	1	1	4	1	1
23. Delay in obtaining test results	1	1	2	1	1	1	1	1	1	1
24. Delay in payments	1	2	2	1	1	3	2	1	1	1
25. Delay in obtaining permission/ permits for transporting materials	1	2	1	1	1	2	1	1	1	2
Factors related environment										
26. Changes in laws or govt. regulations	3	1	1	1	2	2	1	1	2	1
27. Shortages of materials in market	3	1	2	1	2	2	1	3	3	1
28. Cost due to adverse weather	2	2	3	1	2	2	1	4	2	2
Factors related defects										
29. Poor quality of work/Re work	1	1	2	2	1	1	1	1	1	1
30. Rectification of defects due to accidents.	1	1	1	1	1	1	1	1	1	1

Factors causing cost overrun	Form No:31	Form No:32	Form No:33	Form No:34	Form No:35	Form No:36	Form No:37	Form No:38	Form No:39	Form No:40
Factors related changes										
01. Changes of scope	3	3	2	1	2	4	4	4	4	4
02. Cost due to extra work	4	4	4	4	4	3	3	3	3	3
03. Cost due to extra quantities	4	4	2	2	2	4	4	4	4	4
04. Changes in Design	3	3	2	1	2	5	5	5	5	5
05. Cost due to additional tests/site investigation other than mentioned in agreements	2	2	1	1	1	4	4	4	4	4
06. Cost due to acceleration of work	1	1	1	1	1	3	3	3	3	3
07. Cost due to omission & mistakes	1	1	1	3	3	4	4	4	4	4
Factors related contract documents										
08. Ambiguities or discrepancies in design/ estimates	1	2	1	1	1	5	5	5	5	5
09. Delay in issuing detail drawings	2	2	1	1	1	5	5	5	5	5
Factors related project Management										
10. Cost due to poor site management and planning	1	2	1	1	1	4	4	4	4	4
11. Cost due to the delay of the instructions/approvals of consultant/ Engineer	2	2	1	1	1	5	5	5	5	5
12. Low or unsound bid	2	2	1	1	1	5	5	5	5	5
13. Cost due to the delay in awarding of contract	1	1	1	1	1	5	5	5	5	5
14. Cost due to the delay in entering of agreement	1	1	1	1	1	5	5	5	5	5
15. Claims due to disputes between consultant and contractor	2	1	1	1	1	3	4	4	4	3
Factors Related finance										

16. Storage/ withdrawal of fund/imprest	2	2	1	1	1	4	4	4	4	4
17. Financial constraints of contractors	2	2	1	1	1	4	4	4	4	4
18. Price fluctuation of materials	2	2	1	1	1	5	5	5	5	5
19. Price fluctuation of currency	2	2	1	1	1	3	3	3	3	3
Factors related delays										
20. Suspension of works	2	2	1	1	1	5	5	5	5	5
21. Delay in site possession	1	2	1	1	1	5	5	5	5	5
22. Delay in obtaining special service connections	1	2	1	1	1	4	4	4	4	4
23. Delay in obtaining test results	2	2	1	1	1	4	4	4	4	4
24. Delay in payments	2	2	1	1	1	4	4	4	4	4
25. Delay in obtaining permission/ permits for transporting materials	1	2	1	1	1	4	4	4	4	4
Factors related environment										
26. Changes in laws or govt. regulations	1	2	1	1	1	5	5	5	5	5
27. Shortages of materials in market	1	2	1	1	1	5	5	5	5	5
28. Cost due to adverse weather	2	2	1	1	1	4	4	4	4	4
Factors related defects										
29. Poor quality of work/Re work	2	2	1	1	1	5	5	5	5	5
30. Rectification of defects due to accidents.	3	3	1	1	1	3	3	3	3	3



Factors causing cost overrun	Form No:41	Form No:42	Form No:43	Form No:44	Form No:45	Form No:46	Form No:47	Form No:48	Form No:49	Form No:50
Factors related changes										
01. Changes of scope	4	2	1	4	3	3	4	5	4	3
02. Cost due to extra work	3	2	2	4	2	3	4	5	4	4
03. Cost due to extra quantities	4	2	3	3	3	3	4	5	4	4
04. Changes in Design	5	2	2	3	1	3	4	4	4	3
05. Cost due to additional tests/site investigation other than mentioned in agreements	4	1	1	3	1	1	3	2	2	2
06. Cost due to acceleration of work	3	1	1	3	2	2	3	3	3	2
07. Cost due to omission & mistakes	4	1	1	3	2	2	3	2	3	1
Factors related contract documents										
08. Ambiguities or discrepancies in design/ estimates	5	1	1	4	2	2	2	3	3	2
09. Delay in issuing detail drawings	5	1	1	4	2	2	2	3	3	2
Factors related project Management										
10. Cost due to poor site management and planning	4	2	1	4	2	2	1	2	2	2
11. Cost due to the delay of the instructions/approvals of consultant/ Engineer	5	2	2	4	2	2	2	3	3	2
12. Low or unsound bid	5	2	2	4	2	2	1	2	2	2
13. Cost due to the delay in awarding of contract	5	2	3	3	1	2	2	2	2	1
14. Cost due to the delay in entering of agreement	5	2	2	3	1	2	2	2	2	1
15. Claims due to disputes between consultant and contractor	3	2	3	3	1	2	2	2	2	2
Factors Related finance										
16. Storage/ withdrawal of fund/imprest	4	2	2	4	1	4	3	3	3	3

17. Financial constraints of contractors	4	1	3	4	1	3	3	2	3	2
18. Price fluctuation of materials	5	1	4	4	1	3	2	3	3	3
19. Price fluctuation of currency	3	1	4	3	1	3	2	3	3	2
Factors related delays										
20. Suspension of works	5	1	1	4	2	2	1	2	2	2
21. Delay in site possession	5	2	1	3	3	2	1	2	2	2
22. Delay in obtaining special service connections	4	2	1	4	2	1	1	2	2	2
23. Delay in obtaining test results	4	2	2	4	1	1	1	1	2	2
24. Delay in payments	4	2	2	4	3	2	2	2	2	2
25. Delay in obtaining permission/ permits for transporting materials	4	2	2	3	2	2	1	2	2	2
Factors related environment										
26. Changes in laws or govt. regulations	5	3	4	3	2	2	2	2	2	2
27. Shortages of materials in market	5	4	4	4	2	2	2	2	2	3
28. Cost due to adverse weather	4	5	3	4	3	2	2	4	3	3
Factors related defects										
29. Poor quality of work/Re work	5	3	3	4	1	2	2	2	2	2
30. Rectification of defects due to accidents.	3	2	3	3	1	2	2	2	2	2

Factors causing cost overrun	Form No:51	Form No:52	Form No:53	Form No:54	Form No:55	Form No:56	Form No:57	Form No:58	Form No:59	Form No:60
Factors related changes										
01. Changes of scope	2	5	4	2	3	5	4	3	4	3
02. Cost due to extra work	3	5	3	2	5	5	5	3	4	5
03. Cost due to extra quantities	3	5	3	2	3	5	5	3	3	4
04. Changes in Design	2	5	4	2	3	5	4	3	3	4
05. Cost due to additional tests/site investigation other than mentioned in agreements	2	2	1	1	1	2	3	2	3	1
06. Cost due to acceleration of work	2	3	3	1	2	3	3	2	3	1
07. Cost due to omission & mistakes	2	2	2	1	1	2	3	2	2	1
Factors related contract documents										
08. Ambiguities or discrepancies in design/ estimates	2	3	2	1	2	3	3	2	2	1
09. Delay in issuing detail drawings	2	3	2	1	2	3	2	2	2	1
Factors related project Management										
10. Cost due to poor site management and planning	2	2	2	1	1	2	2	2	3	1
11. Cost due to the delay of the instructions/approvals of consultant/ Engineer	2	3	2	1	1	2	2	2	2	2
12. Low or unsound bid	2	2	1	1	1	2	2	2	2	1
13. Cost due to the delay in awarding of contract	2	2	1	1	1	2	2	2	2	1
14. Cost due to the delay in entering of agreement	2	2	1	1	1	2	2	2	3	1
15. Claims due to disputes between consultant and contractor	2	2	2	1	1	2	2	2	3	1
Factors Related finance										
16. Storage/ withdrawal of fund/imprest	3	3	2	1	2	2	4	3	3	2

17. Financial constraints of contractors	3	3	2	2	2	2	4	3	4	2
18. Price fluctuation of materials	3	2	2	2	2	3	3	3	3	1
19. Price fluctuation of currency	3	2	2	2	2	3	3	3	3	1
Factors related delays										
20. Suspension of works	2	2	2	1	2	2	3	2	2	1
21. Delay in site possession	2	2	2	1	1	2	3	2	2	1
22. Delay in obtaining special service connections	2	2	1	1	1	2	2	2	2	1
23. Delay in obtaining test results	2	2	1	1	1	2	2	2	3	1
24. Delay in payments	2	2	2	1	1	2	3	2	3	2
25. Delay in obtaining permission/ permits for transporting materials	2	2	1	1	1	2	2	2	2	1
Factors related environment										
26. Changes in laws or govt. regulations	2	2	2	1	1	2	2	2	2	1
27. Shortages of materials in market	2	3	2	1	1	2	2	2	3	1
28. Cost due to adverse weather	3	3	3	2	2	3	3	3	3	2
Factors related defects										
29. Poor quality of work/Re work	2	2	1	1	1	2	2	2	3	1
30. Rectification of defects due to accidents.	2	2	1	1	1	2	2	2	3	1

Factors causing cost overrun	Form No:61	Form No:62	Form No:63	Form No:64	Form No:65	Form No:66	Form No:67	Form No:68	Form No:69	Form No:70	Form No:71
Factors related changes											
01. Changes of scope	4	3	4	4	3	3	3	5	3	4	3
02. Cost due to extra work	5	5	3	5	4	3	4	4	3	5	3
03. Cost due to extra quantities	4	5	3	3	4	3	4	4	3	4	3
04. Changes in Design	4	3	3	3	3	4	3	5	3	3	3
05. Cost due to additional tests/site investigation other than mentioned in agreements	1	2	2	2	2	1	2	3	2	1	2
06. Cost due to acceleration of work	2	3	2	2	2	1	2	3	3	1	2
07. Cost due to omission & mistakes	1	2	2	2	2	1	2	3	3	1	2
Factors related contract documents											
08. Ambiguities or discrepancies in design/ estimates	2	2	2	1	2	1	1	2	3	2	2
09. Delay in issuing detail drawings	2	2	2	1	2	1	1	2	3	2	2
Factors related project Management											
10. Cost due to poor site management and planning	2	2	2	2	2	1	2	3	3	1	2
11. Cost due to the delay of the instructions/approvals of consultant/ Engineer	2	2	2	2	2	1	2	3	3	2	2
12. Low or unsound bid	2	2	2	2	2	1	2	3	3	1	2
13. Cost due to the delay in awarding of contract	2	2	2	2	2	1	2	3	3	2	2
14. Cost due to the delay in entering of agreement	2	2	2	2	2	1	2	3	3	2	2
15. Claims due to disputes between consultant and contractor	2	2	2	2	2	1	2	3	3	2	2
Factors Related finance											
16. Storage/ withdrawal of fund/imprest	2	3	3	2	3	2	3	4	3	4	3

17. Financial constraints of contractors	2	3	3	2	3	2	3	4	3	4	3
18. Price fluctuation of materials	2	3	3	2	4	2	3	4	3	4	2
19. Price fluctuation of currency	2	3	3	2	4	2	3	4	3	3	2
Factors related delays											
20. Suspension of works	1	2	2	1	2	1	2	2	2	2	2
21. Delay in site possession	1	2	2	1	2	1	2	2	2	2	2
22. Delay in obtaining special service connections	1	2	2	1	2	1	2	2	2	2	2
23. Delay in obtaining test results	1	2	2	1	2	1	2	2	2	2	2
24. Delay in payments	2	3	3	1	2	1	2	2	2	1	3
25. Delay in obtaining permission/ permits for transporting materials	1	2	2	1	2	1	2	2	2	1	2
Factors related environment											
26. Changes in laws or govt. regulations	1	2	2	1	2	1	2	2	3	1	2
27. Shortages of materials in market	1	2	2	1	2	1	2	2	3	2	2
28. Cost due to adverse weather	2	3	2	2	3	3	2	3	3	2	3
Factors related defects											
29. Poor quality of work/Re work	1	2	2	2	2	1	2	2	2	2	2
30. Rectification of defects due to accidents.	1	2	2	2	2	1	2	2	2	1	2

