# 南スーダン国 内水輸送運営管理能力強化プロジェクト 終了時評価調査報告書

平成 27 年 5 月 (2015年)

独立行政法人国際協力機構 社会基盤 · 平和構築部 基盤 JR 15-115

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# 序 文

独立行政法人国際協力機構は、2010 年 12 月に南スーダン国と締結した討議議事録 (R/D) に基づき、運輸・道路・橋梁省を対象として、2011 年 3 月から技術協力プロジェクト「内水輸送運営管理能力強化プロジェクト」を実施しています。

このたび、本プロジェクトの協力終了前になったところ、プロジェクトの活動の実績、成果を相手国側関係機関と合同で評価・確認するとともに、今後のプロジェクト活動に対する提言及び今後の類似事業の実施にあたっての教訓を導き出すことを目的として、終了時評価調査団を派遣しました。

調査団は、南スーダン国の終了時評価メンバーと合同評価調査団を構成して現地調査を行い、 その結果を合同終了時評価報告書として取りまとめました。報告書の内容は、プロジェクト関係 者に報告され、目標達成度、成果及び5項目評価の内容が確認されるとともに、提言内容は今後 取り組む事項として確認されました。

本報告書は、同調査団による終了時評価結果及び協議結果を取りまとめたものであり、今後の協力事業の実施にあたり、広く活用されることを願うものです。

終わりに、本調査にご協力とご支援を頂いた関係者の皆様に対し、心から感謝の意を表します。

平成 27 年 5 月

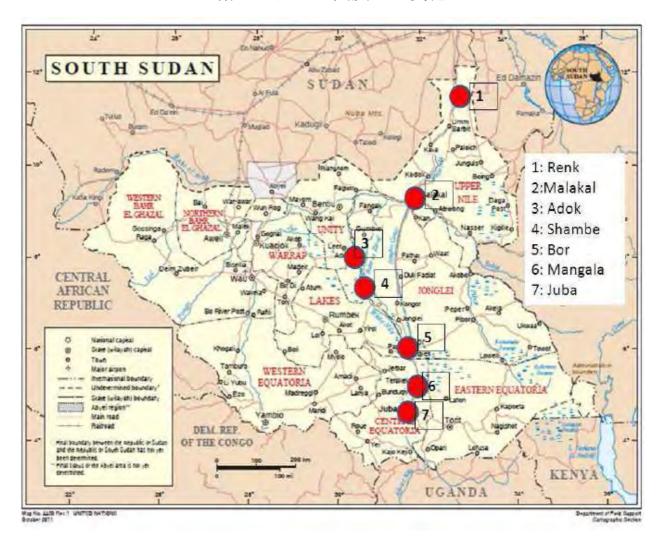
独立行政法人国際協力機構 社会基盤·平和構築部長 中村 明

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# 南スーダン地図及び主要港



出所: OCDI 報告書

# 写 真



緊急開発調査のフォローアップ協力により ジュバ港に設置されたクレーン



人力によるスモールボートへの荷役作業



セキュリティフェンス設置予定場所



ジュバ港桟橋視察状況



WFP 南スーダン事務所へのインタビュー



ミニッツ署名後の署名者

# 略語表

略語	正式名称	日本語
BHN	Basic Human Needs	ベーシック・ヒューマン・ニ ーズ
C/P	Counterpart	カウンターパート
CES	Central Equatoria State	中央エクアトリア州
СРА	Comprehensive Peace Agreement	南北包括和平合意
DAC	Development Assistance Committee	開発援助委員会
DG	Director General	長官
DRC	Democratic Republic of the Congo	コンゴ民主共和国
DRT	Directorate of River Transport	運輸・道路・橋梁省河川交通 局
FFP	Fire-fighting Plan	消防計画
FY	Fiscal Year	会計年度
GOJ	Government of Japan	日本政府
GOSS	Government of South Sudan	南スーダン政府
IMO	International Maritime Organization	国際海事機関
ISPS Code	International Ship and Port Facility Security Code	船舶及び港湾施設の保安に関 する国際規則
JCC	Joint Coordinating Committee	合同調整委員会
JICA	Japan International Cooperation Agency	独立行政法人国際協力機構
JRPA	Juba River Port Administration	ジュバ港管理組織
KEI	Katahira and Engineers International	株式会社片平エンジニアリン グインターナショナル
M/M	Minutes of Meeting	協議議事録
МОРІ	Ministry of Physical Infrastructure	インフラ省
МОТ	Ministry of Transport	運輸省
MT	Metric Ton	メトリックトン
MTRB	Ministry of Transport, Roads and Bridges	運輸・道路・橋梁省
NRTC	Nile River Transport Corporation	北部河川交通社
OCDI	Overseas Coastal Area Development Institute of Japan	国際臨海開発センター
ODA	Official Development Assistance	政府開発援助
OECD	Organization for Economic Cooperation and Development	経済協力開発機構
OJT	On-the-Job Training	オンザジョブ・トレーニング
OSMP	Oil Spill Management Plan	油流出等災害に対する危機管 理計画書

OVI	Objectively Verifiable Indicator	指標
PDM	Project Design Matrix	プロジェクト・デザイン・マ トリックス
PFSA	Port Facility Security Assessment	港湾施設保安アセスメント
PFSP	Port Facility Security Plan	港湾施設保安計画
PO	Plan of Operations	活動計画
RSS	Republic of South Sudan	南スーダン共和国
TF	Task Force	タスクフォース
TR & B	Transport, Road and Bridge	運輸道路橋梁
TSP	Transport Sector Policy	運輸分野方針
WBS	Work Breakdown Structure	作業明細構造
WFP	World Food Programme	国連世界食糧計画
WG	Working Group	ワーキング・グループ
WS	Workshop	ワークショップ

# 終了時評価調査結果要約表

1. 案件の概要						
国名:南	スーダン共和国	案件名:内水輸送運営管理能力強化プロジェクト				
分野:運輸		援助形態:技術協力プロジェクト				
所轄部署	: 社会基盤・平和構築部、運輸交	協力金額(評価時点): 5.38 億円				
通・情報は	<b>通信グループ</b>					
	2011年03月01日~	先方関係機関:運輸・道路・橋梁省、中央エクアト				
	2015年08月31日	リア州インフラ省、ジュバ港管理組合				
	(R/D 署名日)	日本側協力機関:				
	2010年12月22日	一般財団法人 国際臨海開発研究センター				
	(変更 R/D 署名日)	株式会社片平エンジニアリングインターナショナ				
協力期間	2015年2月3日	ル				
肠刀粉间		他の関連協力:				
		緊急開発調査及びフォローアップ協力:「ジュバ市				
		内・近郊地域緊急生活基盤整備計画」(2006~2010				
		年)				
		無償資金協力「ジュバ河川港拡充計画」(E/N 署名:				
		2013年1月)				

#### 1-1 協力の背景と概要

2005年1月の南北包括和平合意(Comprehensive Peace Agreement: CPA)を経て、スーダン国政府とスーダン人民解放軍との50年にわたる内戦が終結した。2011年1月9日、CPAに基づいて南スーダンの独立を問う住民投票が行われた結果、同年7月9日に南スーダン共和国(以下、「南スーダン」と記す)が誕生した。

南スーダンでは、日常生活に必要な物資の需要が急増し、インフラの開発が急務となり、内陸国である南スーダンにとって、安定的かつ効果的な周辺国とを結ぶ物流システムの確保が求められている。紅海沿岸に位置するスーダン国ポートスーダンとジュバを結ぶルートは復興を支える生命線であるが、スーダン国の首都ハルツームと南スーダンのジュバを結ぶ幹線道路は一部区間を除いて未舗装のままであり、また白ナイル川西側に大きく迂回する経路をたどるため、道路輸送能力は限定的である。そのため、白ナイル川で結ばれているスーダン国のコスティ港と南スーダンのジュバ港間における内水輸送が南スーダンへの物流において非常に大きな役割を担っている。しかしながらジュバ港は、内戦中に破壊されたために係留施設がなく、土手にバージを乗り上げる形でしか接岸できず、内水輸送能力もまた限定的であり、北部からの物流は輸送コストの高い空輸に依存する状況にあった。

JICA はこれまで緊急開発調査やフォローアップ協力を通じ、ジュバ港における桟橋整備や資機材供与を実施してきた。さらに、無償資金協力事業「ジュバ河川港拡充計画」(以下、無償資金協力事業)では、桟橋(200m)、大型クレーン、上屋等の整備が計画されており、機械化荷役の本格導入による貨物取扱能力の増強が期待されている。また、南スーダン運輸省\*(Ministry of Transport/Republic of South Sudan: MOT/RSS)、中央エクアトリア州政府インフラ省(Ministry of Physical Infrastructure/Central Equatoria State: MOPI/CES)は、ジュバ港の維持管理を目的として

ジュバ港管理組織 (Juba River Port Administration: JRPA) を共同で設立し、その職員に対し、JICA は港湾の維持管理に必要な初歩的な技術移転を緊急開発調査・フォローアップ協力において行った。

※運輸省 (MOT) は 2011 年 8 月に運輸・道路・橋梁省 (MTRB) に改編された。

このような背景の下、南スーダンはジュバ港の拡張プロジェクトにより供与される施設や機材を適切に維持管理していくために JRPA や関連機関の運営・維持管理能力を強化すること、また、ジュバ港で得られた知見を他の南スーダンの主要港と共有することを目的とし、日本政府に対して技術協力の要請を行った。この要請を受け、国際協力機構(JICA)は、2011 年 3 月から 4 年間にわたり、技術協力プロジェクト「南部スーダン内水輸送運営管理能力強化プロジェクト(現:南スーダン国内水輸送運営管理能力強化プロジェクト」と記す)を実施することに合意した。

本プロジェクトは JRPA を主たるカウンターパート (Counterpart: C/P) として実施した。プロジェクト期間は当初は 2011 年 3 月から 2015 年 2 月までの予定であったが、南スーダンの情勢悪化により 2013 年 12 月から 2014 年 12 月まで現地渡航が禁止となった。渡航禁止中の現地での活動を補うため、約 4 年間としていた協力期間を 2015 年 8 月まで延長して日本国内で関連マニュアルの作成作業を行うとともに、渡航禁止措置が解除された 2015 年 4 月に最終の現地派遣を行い、技術指導を実施した。

なお、情勢悪化により無償資金協力事業も本プロジェクト実施中に工事が開始されなかった。 そのため、無償資金協力事業により施設が整備されることを前提として計画していた活動が大きく制限されることとなった。

#### 1-2 協力内容

- (1) 上位目標:南部スーダンにおいて内水輸送が円滑化され、輸送能力が拡大する。
- (2) プロジェクト目標:

ジュバ港の港湾管理能力が強化される。

ジュバ港で構築された港湾管理手順が南スーダン各港間で共有される。

#### (3) 成果:

- 1) ジュバ港管理組織(JRPA) の役割と責務が確立され、適切に機能する。
- 2) JRPA の予算・決算制度が確立される。
- 3) ジュバ港の施設が適切に維持管理される。
- 4) ジュバ港において安全で効率的な荷役が行われる。
- 5) ジュバ港が安全、安心かつ、環境にやさしく管理される。
- 6) ジュバ港の港湾統計データが収集され、更新及び港湾管理に活用される。
- 7) ジュバ港で蓄積された知識及び経験が南スーダン主要港職員間で共有される。
- (4) 投入(2015年3月末時点)
  - 1) 日本側

長期専門家派遣人数:12名 在外事業強化費:21,836,861円

本邦/第三国研修受入人数: 42名 機材供与: 1,107,360 円 + US\$4,120

+ US\$50,950(フェンス資材)

2) 南スーダン側

カウンターパート配置人数:31名

## 2. 評価調査団の概要

	担当分野	氏	名			所 属		
日本側	総括	小柳	桂泉	JICA 社会基	盤•平和構築	整部運輸交通	<ul><li>情報通信ク</li></ul>	ブループ
				第二チーム	主任調査役			
	評価分析	大前	正也	株式会社サク	セス・プロ	ジェクト・マ	マネジメント・	・オフィス
				代表取締役				
南スーダン	南スーダン側		1anyok	Simon Chol	運輸・道路	・橋梁省 🏻	内陸水運総局	政策調査
					オフィサー			
調査期間	2015年4月	5 日~	~2015 <sup>4</sup>	<b>丰4月17日</b>		評価種類	終了時評価	

# 3. 評価結果の概要

#### 3-1 実績の確認

成果、プロジェクト目標などの達成度について以下に記す。無償資金協力事業の遅れ及び南 北スーダンの情勢悪化により、一部の活動には大きく影響が出た。

#### (1) 成果の達成度

成果1:ジュバ港管理組織(JRPA)の役割と責務が確立され、適切に機能する。

おおむね達成されたと判断される。指標 1-1「南部スーダンにおける港湾管理法体系案の起草作業の進捗状況」に関しては、港湾運営方針(案)、法令の骨子(案)、港湾に係る基本的な法体系(案)などの作成が法律専門家の協力も仰ぎながら進められている。指標 1-2「ジュバ港の管理運営業務に係るマニュアルが作成される」に関しては、JRPA の役割と責務に関し、議論、セミナー、訓練を通じて確認され、関係者間で役割と責務を定義する文書が作成された。これら役割分担と責務の運用と定着については、今後、無償資金協力事業の完工及び河川物流の回復を待つことなく、業務を進めていく。以上のことから、成果 1 はおおむね達成されたと判断する。

#### 成果2:JRPAの予算・決算制度が確立される。

おおむね達成されたと判断される。指標 2-1「予算要求資料を作成し、予算が要求される」に関しては、JRPA の港湾管理者としての予算・決算制度については関係機関に説明して理解を得て、実際に財務省に予算要求をした。しかし情勢悪化のため、この予算執行には至らなかった。指標 2-2「港湾タリフ(利用料金表)案が起草される」、指標 2-3「施設等の貸付に関する規則案(約款等)が起草される」に関しては、既存港湾施設を前提としたタリフ(案)、貸付規則(案)が検討されて取りまとめられた。以上のことから、成果 2 はおおむね達成されたと判断する。

成果3:ジュバ港の施設が適切に維持管理される。

おおむね達成されたと判断される。指標 3-1「施設点検マニュアルが作成される」に関し

ては、既存施設及び無償事業完了後の新規施設の点検マニュアルを作成済みである。指標 3-2「作成されたマニュアルに基づき施設の点検・補修が実施される」に関しては、既存桟 橋の維持管理点検についてはマニュアルに基づいて実施されているが、無償事業が完了していないため新規施設の維持管理点検は実施に至っていない。指標 3-3「施設台帳が整備、管理される」に関しては、管理台帳を作成済みである。指標 3-4「ジュバ港のバース水深が測定・記録される」に関しては、JRPA 職員が測量機器を用いて測定をできるようになった。以上のことから、成果 3 はおおむね達成されたと判断する。

## 成果4:ジュバ港において安全で効率的な荷役が行われる。

おおむね達成されたと判断される。指標 4-1「新施設対応マニュアルが整備される」及び指標 4-3「荷役サービス規則案が作成される」に関しては、既存及び無償事業で整備される新規施設・機材に係る荷役作業マニュアル及び荷役サービス規則(案)を作成済みである。指標 4-2「バース調整システムが準備・導入される」に関しては、無償工事中や新規施設のバース調整について指導を行った。また、現行の港湾活動に対する入出港手続き、バース調整計画を導入し、港湾関係者間で試行した。指標 4-4「コンテナ荷役効率の改善方法が示される」に関しては、モバイルクレーンを活用した実際のコンテナ荷役作業の状況をビデオ撮影して安全な荷役作業の教材として取りまとめた。以上のことから、成果 4 はおおむね達成されたと判断する。

### 成果5:ジュバ港が安全、安心かつ、環境にやさしく管理される。

おおむね達成されたと判断される。指標 5-1「港湾関連サービスの供給者に関する規則が起草される」に関しては、規則(案)は完成しており、今後、現地の状況(法制度整備及び施設整備等)に合わせて導入が検討される。指標 5-2「港湾内の保安計画案が作成され、研修及び訓練が実施される」、指標 5-3「消火・消防計画書が作成され、訓練が実施される」、指標 5-4「油流出等災害に対する危機管理計画書が作成される」に関しては、新規施設用の計画書をそれぞれ作成し、ジュバ港管理運営業務マニュアルにも加えた。消火・消防計画に関しては訓練も実施した。指標 5-5「油流出災害等を想定した訓練が実施される」に関しては、油流出災害を想定した机上訓練及びオイル吸着マットやオイルフェンスを用いた現場訓練を実施した。以上のことから、成果 5 はおおむね達成されたと判断する。

## 成果6:ジュバ港の港湾統計データが収集され、更新及び港湾管理に活用される。

おおむね達成されたと判断される。指標 6-1「港湾統計データ収集マニュアルが作成される」、指標 6-2「統計データベースが整備、利用される」、指標 6-3「簡易な港湾統計書が取りまとめられる」に関しては、港湾統計データ収集マニュアルを作成し、手書きで記録していたデータの電子化、データ取得方法、簡易な港湾統計書の作成方法などについて技術指導し、港湾統計の目的についても理解が得られた。一方で、スーダン国との外交関係悪化により南北スーダン間の物流が途絶えており、限られたデータしか得られないのが現状である。貨物量が少ないため活動は限定的であるものの、マニュアルが整備され、現状の貨物量のもとで可能な活動は継続していることから、成果 6 はおおむね達成されたと判断する。

#### 成果7:ジュバ港で蓄積された知識及び経験が南部スーダン主要港職員間で共有される。

おおむね達成されたと判断される。指標 7-1「ジュバ港以外の港湾の管理組織に対する研修・セミナーの実施回数」に関しては、マラカル港で計 3 回の現地調査、ワークショップ

を開催したが、その後は情勢悪化により地方への渡航ができなくなったため、活動は限定的となった。指標 7-2「ジュバ港以外の港湾管理組織からの研修・セミナーの参加者」に関しては、地方の河川港の港長や職員をジュバ港に集めた港湾管理手法に係る集中講義、第三国研修などを実施した。情勢悪化により成果 7 に係る活動は限定的になったものの、ジュバ港や第三国における技術指導により、成果 7 はおおむね達成されたと判断する。

#### (2) プロジェクト目標の達成見込み

プロジェクト目標1:ジュバ港の港湾管理能力が強化される。

2:ジュバ港で構築された港湾管理手順が南スーダン各港間で共有される。

プロジェクト目標の達成度は中程度と判断される。指標 1「ジュバ港の新ターミナルが円滑に運営される」に関しては、無償事業が開始されておらず、新ターミナルが完成しなかったため、新ターミナルの実際の運用は達成されなかったが、ジュバ港管理運営業務マニュアルを整備したことにより、既存施設の港湾管理能力は向上し、これは新ターミナルの円滑な運営につながるものと思われる。指標 2「ジュバ港で構築された港湾管理手順が南スーダン各港間で共有される」に関しては、プロジェクトチームの地方港への渡航が制限されたことと、情勢悪化の影響で職員が配置されない地方港もあったため、当初予定よりも共有が限定的となったものの、ジュバ港や第三国での技術支援により一定程度の共有が行われた。以上のことから、プロジェクト目標はおおむね達成されたと判断する。

#### 3-2 評価結果の要約

# (1) 妥当性:比較的高い

南スーダンの 2013~2017 年の「運輸分野方針」(MOT/RSS, April 2013)は、効率的な物流網の確立、安全な運輸サービスの提供、運輸・道路・橋梁省(Ministry of Transport, Roads and Bridges: MTRB)の運営能力強化の重要性などを基本政策として掲げている。CPA によって定められた暫定期間 6 年(2005~2011 年)の南北スーダン開発の枠組み「スーダン合同評価ミッション報告書」においても、運輸・交通開発、インフラの整備は優先課題として位置づけられている。さらに河川輸送については、「南スーダン開発イニシアティブ2013-2020」(2013 年 1 月)において、河川輸送に係るインフラ整備、航行援助施設整備、河川輸送サービスに係る法整備に高い優先順位を設定しており、河川輸送に従事する職員の訓練プログラム開発を重要視しており、その開発と実施に技術支援が必要である旨、示されている。

わが国の対南スーダン援助方針との整合性に関しては、2012 年 6 月、日本政府は対南スーダンの事業展開計画で 2 つの重点開発課題(1.インフラ整備、2.ガバナンス能力強化)を掲げている。上記に基づいて策定された協力プログラム「インフラ整備プログラム」を通じて、首都ジュバを中心とした持続的な経済成長を下支えするインフラ整備を支援し、地域格差是正による平和定着に向け地方での取り組みを強化していくこととしている。本プロジェクトは、内水輸送の運営管理能力向上を通じて安定した物流サービスを確保して南スーダン内の地域格差是正につながるものであり、これらの観点からわが国の南スーダン援助方針と合致する。

「緊急開発調査及びフォローアップ協力」「無償資金協力」「課題別研修」のすべてが各々インフラ整備、機材許与、人材育成を有機的に組み合わせて実施されており整合性は確保されている。そのなかで「無償資金協力」による施設・機材整備の遅延は本プロジェクトの大きな阻害要因となっている。

南スーダンでは、独立後の急速な開発に伴い、ジュバ港をはじめとする各港において取扱貨物量の増加が見込まれている。しかしながら、南スーダンとスーダン国間の物流が減少・停滞していることから、貨物量は減少している現状である。その原因となっている両国の関係が改善されれば、貨物量の増加は見込まれると考えられる。よって、港湾管理運営能力を向上させることは必要不可欠であり、貨物量増加に備えて、対象港においてプロジェクトを実施するニーズは高い。

国内産業の発展以前に、国連の支援物資の輸送、帰還難民の移送に河川輸送は重要であり、スーダン国との物流の停滞によりバージ船での貨物輸送は減少しているが、小型ボートによる物流は食料、生活物資などの輸送に寄与している。スーダン国との関係が改善されれば、河川輸送貨物量は増加が見込まれるため、現状のベーシック・ヒューマン・ニーズ (Basic Human Needs: BHN)対応に加えて産業振興に貢献することが期待される。

他輸送モードとの比較データはないが、劣悪な道路整備には相応の期間を要することが 考えられるため、本プロジェクトで支援した南北河川輸送の重要性は高い。

#### (2) 有効性: やや低い

現状で確保できていない外部条件がプロジェクト終了時まで続いた場合、プロジェクト目標の達成度は低い。プロジェクト目標1に関して、オンザジョブ・トレーニング(On-the-Job Training: OJT) 及び他の活動に参加した JRPA 職員の能力は強化され、港湾維持管理、運用に係るインセンティブは強化された。この活動が継続される場合には、JRPA の管理能力は向上するであろう。他方、プロジェクト目標2 に関しては、対象とする港に十分に職員が配属されなかった。実質的に機能していないジュバ港以外の各港へ配属される予定の職員に対しては、ジュバ港での指導により対応したが、実際の運用には至っていない。

JRPA の管理能力が強化されたことに関する成果  $1\sim6$  により、プロジェクト目標は達成されることが想定される。さらに、成果 7 による活動を通じて OJT その他の活動により蓄積された知識と経験により、プロジェクト目標 2 は達成されるであろう。したがって成果からプロジェクト目標への論理性は確保されているということができる。プロジェクト開始当初からの C/P の退職、辞任はみられないため、外部条件 1 は確保されているといえる。外部条件 2 に関しては、無償資金協力事業により整備される荷役のための新しい施設を効果的かつ適切に活用し、JRPA の管理能力を強化することが目的の 1 つである。本プロジェクトでは、既存の施設のみならず、新規施設に対応できる技術移転を行ったものの、1 年半以上にわたって、当該無償資金協力事業は遅延したため、十分な技術移転を行うに至らなかった。

年間 7 カ月に及ぶ雨期によって広大な地域が水面下となる地理的要因により、内戦前に記録されたように国内貨物量の 60%が河川交通に依存しており、道路による物流は困難である。これは河川交通が年間 7 カ月の生命線といえる。さらに、安価かつ大量な輸送は河川交通の利点である。

#### (3) 効率性:中程度

専門家の質については C/P からの聞き取りでは高く評価されており、実績については、大規模港湾から河川港までの多様性に対応している専門家集団であるため、客観的にも高く評価される。しかし量・タイミングについては、南スーダン側の事情である治安悪化による 2013 年 12 月~2015 年 3 月までの専門家派遣延期は、プロジェクトの進捗に大きく影響した。専門家による現地活動ができない期間を利用して各専門家によりマニュアルが整備され、このマニュアルによる技術指導により、当該延期期間中の遅れを少しでも取り戻すべく 2015 年 3 月~4 月にかけて最後の現地活動が実施された。無償資金協力事業との遅れにより連携ができなかったことは、結果として専門家の投入のタイミングという観点から効率性に欠けたといわざるを得ない。

光波距離計、オートレベル、測深用レッドロープ、パソコン等の機材を調達し、プロジェクト活動に活用しており、最低限の投入により機材面に係る技術指導は完了した。しかし無償資金協力事業による施設・機材に係る技術指導は実施できなかった。また当初は計画されていなかったが、港内の治安維持のためのセキュリティフェンス用の資材を調達し、現在設置工事中であり、完工すれば、港内の治安維持に資する。

プロジェクトサイトには十分な施設・機材が整備されていないため、本邦及び第三国(ケニア、カンボジア)での研修は、各課題(管理レベルの法整備から実務レベルの機材運用習熟まで)に対応しており、現地では経験のできないレベルであるとともに、無償資金協力事業による施設・機材が整備された状況を想定した研修であった。

各港への人員配置については、ジュバ以外の港の安全性及び物流の停滞を考慮してプロジェクトのスケジュールに合わせた配置はできなかったが、ジュバでの技術指導の成果は、今後、他の港が稼働し始めた際に各港で活用されることを想定している。

#### (4) インパクト:中程度

南北スーダンの関係悪化により国際河川物流は停滞しており、内航の国連の支援物資や 帰還難民の移動、及び小型のボートによる物流に限られ、至近に輸送能力が大きく拡大す る可能性は低いため、上位目標の達成には時間を要する。上位目標達成には、まず無償資 金協力によるジュバ港の施設・機材の拡充、本プロジェクト協力対象港の整備及び更なる 制度整備、人材育成が必要である。

河川物流の停滞については、南北スーダン情勢が課題となるが、そのめどはたっていない(阻害要因)。ジュバ港をはじめとする南スーダンの主要港の整備のみでは上位目標を達成することはできず、前提条件の「南スーダンにおいて治安状況が大幅に悪化しないこと」が確保されなければならない。

予期しなかった正の影響は以下の3点が挙げられる。

- 1) 最も顕著な影響は、南スーダン側が法律よりも政策が重要であることに気づいたことである。政策の整備は PDM に記載されていなかったが、南スーダン側の意向を汲んでプロジェクト実施中に新たに活動に取り入れた。現在、南スーダン政府の MTRB が、優先課題として運輸政策、河川港政策を策定中である。
- 2) 次に、統計処理、会計等、港湾管理に必要なパーソナルコンピュータ能力の向上である。プロジェクトチームは関連活動実施に必要な活動として追加し、専門家の指導によ

り、他の C/P に指導できるレベルまで達した。

3) プロジェクト活動を通じて、問題・課題を自ら解決しようという JRPA 職員の意識が高まっており、主体的に活動を行うようになってきた。また、OJT により JRPA 職員の港湾の運営管理能力も徐々に強化されつつある。今後は、高まった JRPA 職員の意識を持続させていくことが期待される。

#### (5) 持続性:中程度

1) 政策、組織、制度面

南スーダンの「運輸分野方針」(GOSS/MTR, 2007)は、効率的な物流網の確立、安全な運輸サービスの提供、MTRBの運営能力強化の重要性などを基本政策として掲げている。また、MOT/RSSは国内の内水輸送を円滑に行うために、港湾能力を向上させることが非常に重要であると感じており、また、南スーダン政府は今後も運輸・交通システムの整備による南スーダンの人々の生活向上に寄与する政策を実施していくとしている。方向性については持続性が確保されているといえるが、各論での政策立案、組織改編、制度改革などの方法論については、自己完結できるレベルとはいい難く、ドナーによる支援等が必要であると考えられる。

#### 2) 技術面

PDM で指定されているすべての成果に係るマニュアル(Juba River Port Administration Operation-Manual)が現地での活動の不足を充足する目的で専門家チームにより作成された。今後は、南スーダン側がこのマニュアルを活用して適切な港湾運営管理業務を行うことにより、プロジェクト終了後の成果の継続的な維持が期待される。

【参考: 当該マニュアル "Juba River Port Administration Operation-Manual"目次】

- 1. General Affairs and Administration Department
- 2. Budget and Accounting Department
- 3. Operation and Statistics Department
- 4. Risk Management and Environment Department
- 5. Mechanical Cargo Handling Department
- 6. Maintenance Department

上述のマニュアル "Juba River Port Administration Operation-Manual" が C/P に十分に理解され、更に新たに配属される職員や人事異動の際の後任職員と共有されることにより、このマニュアルが実施機関内で定着することが期待される。しかし現状では新規施設・機材については、それらが整備されることを想定しているにすぎず、実際に新規施設・機材整備が完了した時点で、マニュアルの定着度を確認する必要があると考える。

## 3) 人的資源面

2011 年に独立したばかりであり、プロジェクト実施期間中に内戦状態に陥り、河川物流の停滞、無償資金協力事業の遅延など、不安定要素が多いなか、オーナーシップは必ずしも高いとはいいきれないが、そのような過酷かつ不確定要素の多い環境下において、ワーキンググループ、ワークショップ等により構成されるタスクフォース活動やプロジェクト実施途中から導入された OJT 活動に C/P は積極的に参加し、技術習熟に努めたことなど、プロジェクトに対する姿勢は評価できると思われる。職員配置の継続性につい

ては、中央政府では人事異動があるものの、実務レベルの TF3 (港湾荷役及び運営関係) においては顕著な異動はみられない。

このように JRPA 及びジュバ港においては、人員数と質については持続性が確保されているといえる。課題は河川物流が活性化し、各港湾機能が復活した際に、移転された技術を新しい港湾機能に効率的に導入する技能の確保である。

#### 4) 財政面

南スーダンはスーダン国への石油輸出を停止しており、石油収入が激減している。さらに、高額の支出が必要な港湾施設、浚渫などへの予算措置は困難である。

# <u>持続性確保のた</u>めの現状モニタリング手法

持続性確保のために、以下の項目についてのモニタリングと日本・南スーダン国側双方で状況の共有が必要であることを確認した。南スーダン側が四半期に1度、JICA南スーダン事務所に報告し、JICA本部に共有されることとした。

- ①河川港政策及び規則の承認状況
- ②タリフ委員会の設置状況
- ③水位の定期観測
- ④機材台帳の定期的更新
- ⑤バージ船の入出港記録
- ⑥通常業務としての港湾区域の定期清掃

#### 3-3 効果発現に貢献した要因

(1) 計画内容に関すること

当初は計画されていなかったが、ジュバの治安悪化による無償資金協力事業の遅れを取り戻すために、できる限りの OJT 活動が実施された。

(2) 実施プロセスに関すること

専門家と C/P 間の知識、情報共有のために、プロジェクトの重要事項決定の際には定例 会議が開かれた。両者間の信頼関係を構築するのに役立ち、更に相互理解と協調が促進されることが期待される。

#### 3-4 問題点及び問題を惹起した要因

(1) 計画内容に関すること

本プロジェクトと並行して実施される予定であった無償資金協力事業の遅延により、新 規施設を対象とした技術移転を十分に行うことが困難な状況となっている。この状況に対 応すべく、既存施設を用いて、新規施設に対応できるような指導が実施されている。

(2) 実施プロセスに関すること

2013年12月の内戦勃発により、専門家の派遣が中断した。専門家グループは本邦において、必要事項の可能な限りのマニュアル化作業を行い、活動が大きく制限されたなかでの技術移転とならざるを得なかった。

#### 3-5 結論

プロジェクトは予定どおりに実施できなかったものの、港湾管理の分野においては個人及び 組織の能力が向上した。しかしながら、プロジェクト目標及び上位目標達成のためには更なる 努力が必要である。

MTRB が取り組んでいる内水輸送の法体系の整備に関し、本プロジェクトは大きく貢献した。 今後、本プロジェクトの成果を定着させるために、南スーダン政府が内水輸送のための基本的 法体系を完成させることが期待される。

本プロジェクトの成果を拡げ、全国レベルで波及させるためには、南スーダン側が本プロジェクトで習得した技術・知識を活用して継続的な活動を行うことが求められる。南スーダン側の活動については、四半期に1度行うモニタリングで注視したい。

本プロジェクトは外部条件に大きく影響を受けたものの、国外での研修や、業務マニュアルの作成など、南スーダン国外での協力がプロジェクトチームにより計画・実施された。このような状況下でも、日本・南スーダン国側双方がプロジェクト目標達成のために真摯に努力したことは評価される。

#### 3-6 提言(当該プロジェクトに関する具体的な措置、提案、助言)

- (1) プロジェクト目標達成のための短期的提言
  - ①本プロジェクトで作成した業務マニュアルなどを、既存の施設・機材及び無償資金協力 事業で整備予定の新たな施設・機材の運営・維持管理のために適切な人材と共有するこ と。
  - ②現状の施設・機材を前提とした港湾運営活動により、技術力向上への継続性を確保すること。

#### (2) 上位目標達成のための中期・長期的提言

内水輸送向上のためには、港のみならず、航路、航行規則、船舶登録・検査、船員訓練及び免許付与、捜索救助、汚染対策、航行援助設備、浚渫などさまざまな事項が整備される必要がある。MTRBが内水輸送の法体系整備に取り組んでいるが、その法体系はこれら事項を包含すべきである。

#### (3) 今後の支援の方向性

本プロジェクトにおいて、無償資金協力事業に関連していない河川港政策(案)、河川港 法体系(案)、JRPA業務マニュアルを作成するなど、一定の成果は達成された。一方で、無 償事業の開始時期のめどがたたない状況であるため、ジュバ港新ターミナルの円滑な運営方 法の検討、作成したマニュアルや料金徴収体系に基づいたジュバ港の管理運営、マニュアル に基づいた施設の点検・補修の実施、施設台帳の更新、バース調整システムの準備・導入な どの項目についてはいまだ実施できていない。無償事業の次の入札時期も定まっていない。

また、南北スーダンの関係悪化による、南北スーダン間のバージ船等の河川物流の停止、情勢悪化などの事由により、一定の能力をもった C/P が必要数配置されていないことから、ジュバ港で構築された港湾管理手順の南スーダン各港での共有、統計データベースの整備等の項目についても実施できていない。

一方で、現在、国連の人道支援オペレーションにより南スーダン域内における人道支援物 資の河川輸送は行われている。

上述の未着手の項目、後継案件で実施すべき協力内容などは、以下の2点の進捗状況による部分が大きい。よって、本プロジェクト終了後に以下の2点について情報収集を行い、それらの結果や進捗を確認した後に、その時点で改めて後継案件の協力内容を検討することとした。検討開始にあたっての条件を以下のとおり設定した。

- ① 無償資金協力事業の工事契約の締結
- ② 貨物取扱量の増加 (バージ船の数が 2011 年の水準まで回復すること) <sup>1</sup>

#### 3-7 教訓

## (1) 仲間意識

本プロジェクトは繰り返し述べてきた困難な条件下で実施された。この事実は日本・南スーダン国側双方のプロジェクトメンバーにプロジェクト目標達成に向けた多大な負担を強いることとなった。このような条件下、専門家チームは OJT を取り入れることにより、C/P との距離を縮め、仲間意識をもつことに努めた。これは ODA 活動において大変重要な成果ということができる。

#### (2) インセンティブと意欲

南スーダンにおいてはプロジェクト開始から状況は悪化し続けた。この困難な状況を少しでも克服するために、専門家チームは C/P のインセンティブと意欲を維持するために、国内、ケニア等の第三国での研修など、プロジェクト計画に工夫をした。また OJT 活動もその観点からである。いうまでもなく、技術的な必要性が大切であるが、インセンティブと意欲を確保するために心理的な要因が、困難な状況下では多くの成果を発現するために必要である。

#### 3-8 フォローアップ状況

当初予定では、本技術協力プロジェクト実施中に、無償資金協力事業「ジュバ河川港拡充計画」による桟橋拡張、荷役機械の整備が完了する予定であった。本技術協力プロジェクトでは、それら無償により整備される新施設・機材の運用維持管理を想定したマニュアル類を整備し、実際に運用してもらう計画としていたが、情勢悪化により無償事業は着工に至らなかったため、実運用は達成されていない。同無償事業は今後実施される予定であるが、現時点で着工のめどはたっていない。

<sup>&</sup>lt;sup>1</sup> 南スーダン国内の人道支援物資輸送を行っているWFPへのヒアリングによると、南スーダン北部地域の情勢が悪いため内水 物資輸送は順調に行われておらず、2014年8月以降のバージ船による輸送は5回のみとのこと。

# **Summary of the Terminal Evaluation**

1. Outline of	f the Project	
Country: Re	public of South Sudan	Project title: The Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan
Issue : Trans	portation	Cooperation scheme: Technical Cooperation
and ICT Grou	harge: Transportation up, Infrastructure and g Department	Total cost (At the Terminal Evaluation): 5.38 million yen
Period	1 <sup>st</sup> March 2011 – 31 <sup>st</sup> August 2015 (R/D) 22 <sup>nd</sup> December 2010 (Revised R/D) 3 <sup>rd</sup> February 2015	Partner Country's Implementing Organization: Ministry of Transport, Republic of South Sudan (MTRB/RSS), Ministry of Physical Infrastructure, Central Equatoria State (MOPI/CES), Juba River Port Administration (JRPA)  Supporting Organization in Japan: The Overseas Coastal Area Development Institute of Japan (OCDI), Katahira & Engineers International  Related Cooperation: Emergency Study on the Planning and Support for Basic Physical and Social Infrastructure in Juba Town and the Surrounding Areas (2006-2010)  The Project for Improvement of Juba River Port (E/N: January 2013)

## 1-1 Background of the Project

The civil conflict lasted over 50 years until the Government of Sudan and the Sudan People's Liberation Movement/Army (SPLM/A) signed the Comprehensive Peace Agreement (CPA) in January 2005. Afterwards, the referendum subscribed in CPA was carried out on 9<sup>th</sup> January 2011. Based on the result, the Republic of South Sudan (RSS) was established on the 9<sup>th</sup> July 2011.

For RSS, as an inland country, as commodities and materials necessary for daily lives and development of infrastructure in the RSS have been rapidly increased, a stable and effective logistics system connecting with surrounding countries is required. The route connecting Port Sudan located in the Red Sea in the Republic of the Sudan and Juba is a lifeline which can support the rehabilitation, but the trunk road between Khartoum, capital of Sudan, and Juba of RSS is un-paved except for a limited part, and follows the course with widely detouring on the White Nile west side, therefore, the road transportation ability is limited. Therefore inland waterway transportation has a big role for logistics between Kosti in Sudan and Juba. However, Juba Port doesn't have berthing facilities because they are physically destroyed during civil war, so the ships are forced to run on the bank, and leads to the limitation of inland waterway transportation and rely on the airlift transportation with higher cost.

The Government of Japan has implemented to developed a pier in Juba port and provided handling equipment through an urgent development study as well as follow-up cooperation. Furthermore, through Japanese grant aid cooperation named "The Juba river port expansion project", a pier of 200m in length, large sized crane and warehouse will be developed. Cargo handling capacity is expected to be increased by introducing a full-scale mechanized handling system. At the same time, the Ministry of Transport, the Republic of South Sudan (MOT/RSS) and the Ministry of Physical Infrastructure, Central Equatoria State (MOPI/CES) jointly established the Juba River Port Administration (JRPA) for the purpose of managing and operating the Juba river port. Rudimentary technical transfer to staff

of JRPA with regard to port management and operation was conducted in charge of the urgent development study and its follow-up cooperation.

Under these circumstances, the MOT/RSS requested a technical cooperation to the Government of Japan to enhance the operation and management capacity of staff in JRPA and other related organizations in order to properly maintain facilities and equipment which will be developed and provided by the Juba port expansion project, and to handle cargo effectively. In addition, knowledge and experience accumulated at the Juba port will be shared among the major ports in the RSS. In response to the official request above, JICA agreed to commence the technical cooperation project called "The Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan" in March 2011 with a duration of four years cooperation with MOT/RSS.

This project was implemented with JRPA as a main counterpart. The original project period was from March, 2011 to February, 2015, but the trip to RSS was prohibited from December, 2013 to December, 2014 due to security deterioration in RSS. After a trip prohibition was lifted up, the project period was extended until August, 2015, and the Project Team conducted the technical assistance activity at the site with the related technical manuals which were made in Japan during the trip prohibition period.

Construction work of the Grant Aid project was not commenced during this project implementation due to security deterioration. Therefore, the activities which were planned under the pre-condition of implementation of Grant Aid project was heavily restricted.

#### 1-2 Contents of Cooperation

```
The aim of the Project:
```

(1 Overall Goal:

)

Inland water transport in South Sudan is facilitated and its capacity enhanced.

(2 Project Purpose:

)

- 1) Management capacity of Juba port is strengthened.
- 2) Port management system established at Juba port is shared among the ports in South Sudan.
  - (3 Outputs:

)

- 1) Roles and responsibilities of Juba River Port Administration (JRPA) are established and executed properly.
- 2) Budget and accounting system of JRPA are established.
- 3) Facilities of Juba port are properly managed and maintained.
- 4) Cargos are handled efficiently and safely at Juba port.
- 5) Juba port is managed and operated safely, securely and environmentally-friendly.
- 6) Statistical data of Juba port are collected, maintained and utilized.
- 7) Knowledge and experience accumulated at Juba port are shared among the ports in South

```
Sudan.

(4 Inputs :
)

Japanese side :
Number of Japanese experts dispatched : 12
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Number of trainee dispatched in Japan and third countries (Kenya and Sudan): 42

The amount of equipment provided : JPY 1,107,360 + US\$ 4,120+US\$50,950 for material of

security fence

Local Operation Cost : JPY21,836,861

South Sudan side :

Number of Counterpart: 31

#### 2. Outline of the Evaluation team

Japanese side	Mr. Yoshimoto KOYANAGI		Infrastruc	Director, Team 2, Tra eture and Peacebuilding ernational Cooperation		Group
514.5	Mr. Masaya OMAE		General I	Manager, Success Projec	et Management Office	
Period of	Evaluation	5 <sup>th</sup> to 17 <sup>th</sup> Ma	r. 2015	Type of Evaluation	Terminal Evaluation	

#### 3. Results of Evaluation

#### 3–1 Project Achievement

The achievements of the outcome and project objective are described below. Some activities were heavily restricted due to delay of Grant Aid project and worsend relationship between Sudan and RSS.

#### (1) Achievement of Outputs

# Output 1 : Roles and responsibilities of Juba River Port Administration (JRPA) are established and executed properly.

It is judged to have been achieved for the most part. Regarding the indicator 1-1 "Regulatory framework of port administration in South Sudan is drafted", draft of guideline of port administration, framework of port policy, port related legal framework, etc. are being implemented with the help of legal professions. Regarding the indicator 1-2 "Institutional operation manuals of Juba port are prepared", roles and responsibilities of JRPA were confirmed through a series of discussions, seminars and trainings which provided necessary documents to define such roles and responsibilities among those concerned. It is planned to concentrate on their executions even though JRPA has been waiting for 1) completion of the grant aid project and 2) recovery of river transport cargo volume. From above points, it is judged to have been achieved for the most part of Output 1.

#### Output 2: Budget and accounting system of JRPA are established.

It is judged to have been achieved for the most part. Regarding the indicator 2-1 "A document for budgetary request is prepared and the budget is requested", the budgetary and accounting system of JRPA as a port management body was explained to the related agencies and understood, and budget request to Ministry of Finance was actually made. However, it didn't come to the budget execution due to security deterioration. Regarding the indicator 2-2 "Port tariff is drafted" and 2-3 "Rules for

leasing port facilities are drafted", the draft of port tariff and leasing regulation was drafted under the condition of existing port facilities. From above points, it is judged to have been achieved for the most part of Output 2.

#### Output 3: Facilities of Juba port are properly managed and maintained.

It is judged to have been achieved for the most part. Regarding the indicator 3-1 "Inspection manuals are prepared", an inspection manual for existing facilities and new facilities to be improved by the Grant Aid project was made. Regarding the indicator 3-2 "Facilities are inspected and maintained according to the manuals", inspection work is being conducted for existing berth based on an inspection manual, but inspection work doesn't come to implementation for new facilities because of delay of Grant Aid project. Regarding the indicator 3-3 "The ledger of port facilities is prepared", the ledger was made. Regarding the indicator 3-4 "The depth of the berths at Juba port are periodically monitored and recorded", JRPA staff could measure the water depth using measurement equipment. From above points, it is judged to have been achieved for the most part of Output 3.

# Output 4: Cargos are handled efficiently and safely at Juba port.

It is judged to have been achieved for the most part. Regarding the indicator 4-1 "Cargo handling manuals for Juba port are prepared" and the indicator 4-3 "A rule for cargo handling services at Juba port is drafted", cargo handling manuals and rules are prepared which are applied to existing facilities and equipment and new ones to be improved by the Grant Aid project. Regarding the indicator 4-2 "Berth allocation system is developed", technical instruction was conducted for berth allocation during the construction work of the Grant Aid project and after completion of it. Furthermore, port entering and leaving procedures and berth allocation system were introduced to current port activities and tried among port related personnel. Regarding the indicator 4-4 "Improvement method of the efficiency for container handling is introduced", the situation of actual container cargo handling work was shot with video and compiled as an educational material for safe cargo handling work. From above points, it is judged to have been achieved for the most part of Output 4.

# Output 5: Juba port is managed and operated safely, securely and environmentally-friendly.

It is judged to have been achieved for the most part. Regarding the indicator 5-1 "Rules regulating port services are drafted", relevant regulation is drafted, and its introduction will be considered according to the surrounding situation (development of legal system, improvement of facilities, etc.). Regarding the indicator 5-2 "Port security plan is prepared and trainings and exercises are implemented", the indicator 5-3 "Fire fighting plan is prepared and fire fighting exercises is implemented according to the plan", the indicator 5-4 "Crisis management plan including oil spill disaster is prepared", each plan for new facilities were made and put into Juba River Port Administration Operation Manual. Exercise was also conducted for fire fighting plan. Regarding the indicator 5-5 "An exercise against oil spill disaster is implemented", the exercise on a desk which assumed an oil-spill disaster and a field training using an oil adhesion mat and an oil boom were conducted. From above points, it is judged to have been achieved for the most part of Output 5.

#### Output 6: Statistical data of Juba port are collected, maintained and utilized.

It is judged to have been achieved for the most part. Regarding the indicator 6-1 "Manuals to collect port statistics and data are prepared", the indicator 6-2 "Database is developed and utilized", the indicator 6-3 "Brief port statistics report is prepared", the objective of port statistical data was understood by making the manuals to collect port statistics and data, computerization of the data which was being recorded by handwriting, the way of data acquisition, compilation method of brief port statistics report. On the other hand, due to the deterioration of diplomatic relationship between the Sudan and RSS, it is the current situation that the logistics activities between two countries is stopping, and only limited data is obtained. Even though the activities are limited, the related manuals have been developed and possible activity is continued under the current cargo volumes, thus it is judged to have been achieved for the most part of Output 6.

# Output 7: Knowledge and experience accumulated at Juba port are shared among the ports in South Sudan.

It is judged to have been achieved for the most part. Regarding the indicator 7-1 "The number of trainings and seminars provided for the staff from other ports", total of three times of field visit and workshop were held at Malakal Port, but the activities became limited because the trip to rural area couldn't be possible due to security deterioration. Regarding the indicator 7-2 "The numbers of staff attended trainings and seminars from other ports", an intensive lecture gathering port masters and staff from rural ports to Juba Port, and third country trainings were conducted. Even though the activities became limited due to security deterioration, by conducting the technical assistance in Juba Port and third country, thus it is judged to have been achieved for the most part of Output 7.

#### (2) Possible achievement of Overall Goal

Project Purpose 1: Management capacity of Juba port is continuously strengthened.

2: Port management system established at Juba port is continuously shared among the ports in South Sudan

It is judged that the achievement level of project purpose is "moderate". Regarding the indicator 1 "Efficient operation of the new facility of Juba River Port is examined", the Grant Aid project has not commenced yet and actual operation of new terminal has not been started, but the Juba River Port administration & operation manual was developed and port administration ability of the existing facilities has been improved and it seems to contribute to smooth operation of new facilities. Regarding the indicator 2 "Capacities of staff at the ports in South Sudan are strengthened", the activities became limited because the trip of project team to rural ports was prohibited and necessary port staff was not assigned in some ports due to security deterioration, but technical know-how was shared to some extent through technical assistance in Juba Port and third country trainings. From above points, it is judged to have been achieved for the most part of Project Purpose.

#### 3-2 Summary of evaluation result

(1) Relevance: Relatively High

As regards the consistency with South Sudan Policies, The basic policy for the year from 2013 to

2017 in Transport Sector Plan, South Sudan (MTRB/RSS, April 2013) prioritizes the establishment of the effective distribution network, offering the safe transport service and strengthening the management capacity of MTRB. Furthermore, development of economic infrastructure such as transport is listed as a priority area to be highlighted in Joint evaluation mission report (2005 - 2011), which is framework of north and south Sudan development and formulated by CPA (Comprehensive Peace Agreement). Furthermore regarding river transport, in the South Sudan Development Initiative 2013-2020 (January 2013), it has set a high priority on infrastructure development related to the river transport, navigation assistance facility development, and legislation relating to river transport service, and also indicating the importance of training program for staff development engaged in river transport, and need for technical assistance to the implementation.

In June 2012, the Government of Japan adopted two prioritized development issues to South Sudan; 1. The development of infrastructure 2. Enhancement of the governance, in a rolling plan. "Program for developing infrastructure" is one of Cooperation Programs to South Sudan based on the rolling plan. Through the Program, the Government of Japan intends to support the development of infrastructure which promotes a continuous economic growth in Juba and focus on activities to reduce regional differences for the consolidation of peace. This project secures stable logistics service through operation and management development of inland waterway transportation, and leads to correction of regional gap in the South Sudan, and accords to the country assistance policy to the country.

Related to the Japanese assistance, the Urgent Development Study and its Follow-up Cooperation, the Grant Aid Project and the Group and Region-Focused Training have been assisting to provide an infrastructure, equipment and human resource development for the port sector respectively. The delay of implementation of the Grant Aid Project for providing facilities and equipment due to unforeseeable security situation in Juba is one of the serious factor of interference of the Project.

Concerning the needs of the Ports in South Sudan, the handling cargo volumes were expected to increase in each port such as Juba port in South Sudan as the rapid development after the independence. In such situations, management capacity of ports needs to be strengthened and the need to implement the Project in ports is high.

The river transport is important for the relief supply of the UN and repatriated refugee more than the development of domestic industry for the time being. Although the traffic volume by barge vessels has been decreasing due to the logistic stagnation with Sudan, the transport by small boats has been contributing to carry food and daily commodity. When the relation with Sudan improves, it is expected to increase the traffic volume by river transport; therefore it is expected to contribute to the industrial development in addition to BHN.

Even though there are no data for comparison with the other mode of transportation, the North-South river transport is very important because it takes time to improve the road network which is very poor condition.

#### (2) Effectiveness: Relatively Low

The achievement of the Project purpose 1-2 is likely to be low if the external conditions, which are not fulfilled at the moment, remain in the same situation until the termination of the Project. Concerning the Project purpose 1, the capacity of the JRPA staff who participated in on-the-job training and other activities has been strengthened, and their incentive in managing and operating port management has been enhanced. Hence, the management capacity will be enhanced on an ongoing basis within JRPA if the activities continue. On the other hand, as to the Project purpose 2, staff has not allocated in target river ports appropriately. The technical instruction was provided at Juba Port to the staff who are to be assigned to other ports, however it has not reached to the actual practical operation.

Through the activities from Output 1-6, given that management capacity of JRPA is strengthened, the Project purpose will be achieved. Furthermore, assuming that knowledge and experiences of JRPA accumulated through OJT and other activities can be shared among the ports through the activities of Output 7, the Project purpose 2 will be achieved. From the above, the project logic is appropriate from Outputs to the Project purpose.

Staff members allocated at the beginning of the Project have not been transferred and resigned, therefore, it can be said that the important assumption 1 is fulfilled. As regards to the important assumption 2, one of main objectives is to enhance the management capacity of JRPA through utilizing the new facilities efficiently and properly, such as a jetty expanded and equipment to handle cargos, provided by Japanese grant aid. The implementation of Japanese Grant aid has been delayed more than one and half year compared to the schedule. Due to the reason above, the Project has provided activities for JRPA to the utmost extent responding not only to the existing facilities but also to the new facilities. However, more than a half of activities are responding to the new facilities, therefore, the technical knowledge cannot be transferred adequately to port staff due to the implementation delay of the Japanese grant aid.

As a challenge to the critical issue, the demand of river transport is 60% of all nationwide cargo transport as recorded before the war because of the substantial geographical constraints especially huge area is covered underwater level in rainy season. The road transportation has heavy difficult for a logistic services under such situation in 7 (seven) month a year. It is obvious the river transport is the lifeline of the country. It is also reasonable way of transport by river because it is cheap and capable for mass volume at once.

#### (3) Efficiency: Moderate

The quality of experts is highly evaluated by hearing from the counterpart and the experts could respond to diversity from large-scale port to river port.; however its quantity and input timing were not satisfied due to postponement of exerts dispatch from December 2013 to march 2015 because of deterioration in the security situation. It is necessary to catch up this delay as much as possible by technical guidance by the experts on March and April 2015 based on the manual which was prepared

during their postponement period. Furthermore, it should be mentioned there was a lack of efficiency because the coordination with the grant aid project could not be made from a standpoint of input timing of the experts.

Several equipment, such as Electric Distance Meter, Automatic Level, Lead Rope and Personal Computer, has been procured to the Project and utilized for activities of the Project. And the material for the security fence around the port area was provided. The installation works has just started and the port security will be secured after its completion.

The quality of the training in Japan and third country (Kenya, Cambodia) which was well prepared on each subject was very much high which could not be experienced in South Sudan because of lack of facilities and equipment. Participants could build image of the coming facilities and equipment under the grant aid project.

It was difficult to allocate properly to each port other than the port of Juba due to the security purpose and slippage of cargo volume in line with the Project schedule. The staff members who have been working and having training at the port of Juba will be allocated to the other ports which start operation in the future.

#### (4) Impact: Moderate

It takes time to achieve the overall goal because of the low possibility to develop river transport capacity. The present situation of river transport is limited to the domestic duties, such as the assistance goods by UN or refugee repatriation due to the deterioration of the North-South relations, and small boat service only. It is necessary to complete the grant aid project for Juba port to enhance the facilities and equipment capacity and the same to the other target ports by this Project. Furthermore, the institutional and human resource development is necessary.

Recovery of the river transport is closely related to the situation between North-South, there is no clear idea as an interference. It is impossible to achieve the overall goal only by the development of primary ports, like the port of Juba. It is obviously necessary to secure the pre-condition "Public security in South Sudan is not deteriorated."

As the unexpected effects, there are following three (3) factors;

- 1) The most noticeable unexpected effect is the awakening of importance by the South Sudan side of the policy higher than the law and regulation. It was not included in the PDM related to the policy matter. The Project has found this fact during implementation of the Project and put how to develop into activities in line with the intention of the South Sudan side. It is not completed yet, but the Transport Policy and River Port Policy are considered as one of the most important matters to be solved by MTRB.
- 2) The next important finding as an unexpected effect is familiarization of the personal computer and its software necessary for statistics, accounting and other necessary subjects related to the port management. This fact was not discussed before the Project; however the Project team found the necessity and added in the program of the Project for the smooth implementation of the related

activities. As a result, the counterparts who have been working for this under the guidance of the experts reached the level to instruct the other counterparts.

3) JRPA's motivation to sort out problems and issues has been raised through the Project and they started activities with their own initiatives. The management capacity of JRPA staff has been strengthened through OJT and other activities. It is expected that the Project maintains the motivation and incentive of JRPA staff.

#### (5) Sustainability: Moderate

### Political, Organizational and institutional Aspects:

The basic policy for the year from 2013 to 2017 in Transport Sector Plan, South Sudan (MTRB/ESS, April 2013) prioritizes the Establishment of the effective distribution network, offering the safe transport service and strengthening the management capacity of MTRB. Furthermore, development of economic infrastructure such as transport is listed as a priority area to be highlighted. The Government of South Sudan has a realization to improve the port management capacity in order to operate smooth cargo transport as the most important matter. It can be said that the sustainability has been secured about directionality, but the level which can be self-contained is difficult to say about policy making on specific issue, organization reform and institutional reform, and is estimated the donor assistance is required.

#### Technical Aspects:

The expert team provided the manual "Juba River Port Administration Operation-Manual" related to all the Outputs which were defined in the PDM with a purpose to satisfy a shortage of activities at site. This manual will contribute to let JRPA keep on working based on the Outputs.

(As reference: Contents of the Manual)

- 1. General Affairs and Administration Department
- 2. Budget and Accounting Department
- 3. Operation and Statistics Department
- 4. Risk Management and Environment Department
- 5. Mechanical Cargo Handling Department
- 6. Maintenance Department

It's expected that the above mentioned manual "Juba River Port Administration Operation-Manual" will be fixed in the organization by well understanding of it by C/P and share with the staff who will be newly assigned by personnel transfer. But it has only assumed that the new facilities and equipment will be provided, it seems necessary to confirm the degree of settlement of the manual when the new facilities and equipment are actually provided in the future.

#### Manpower Aspects:

Because it has just become independent in 2011 and faced deterioration of security situation during project implementation, there are a lot of destabilizing elements of logistic stagnation, delay of grant aid project, and it cannot be judged the ownership of C/P was always high. Under such circumstances,

it can be evaluated that the C/P was involved in the project in active manner and made an effort toward technological acquirement aggressively. Some personnel transfer in the central government are found, but conspicuous change is not found in TF3 of the practical work level (cargo handling and operation)

It can be said that the sustainability in terms of JRPA and Juba Port has been secured about the number and the quality. The issue is securement of the skill which will be introduced into the port function efficiently when river transport was activated and each port function restored.

#### Financial Aspects:

South Sudan has stopped to export oil to Sudan and the revenue from the oil production has decreased. Moreover, it is difficult to secure all expense which is very high cost projects, such as the facilities of port, dredging and so on.

# Necessary measures for monitoring the situation toward to secure sustainability

The following items are to be monitored to share with both sides to secure sustainability. The South Sudan side report to JICA South Sudan Office once in a quarter of the year and the report will be shared with JICA HQs.

- 1) Progress of the authorization of the river port policy and regulation
- 2) Establishment of a tariff committee
- 3) Periodical measurement of water level
- 4) Periodical updating of the equipment ledger
- 5) Recording of barges accommodated
- 6) Periodical cleaning of port area as a routine work

#### 3–3 Factors that promoted realization of effects

## (1) Factors concerning to planning

Although it was not planned initially, the practical trainings by OJT were planned and implemented to a maximum extent because the delay of the grant aid project due to unforeseeable security situation in Juba. This measure has made the lack of technical transfer minimum due to the said delay.

#### (2) Factors concerning to the Implementation Process

Meetings have been periodically held to share the knowledge and information between Japanese experts and C/P and to decide the important issues of the project. Japanese experts have the confidence that the communication with C/P has been improved, and have the opinion that further understanding and collaboration should be promoted.

### 3–4 Factors that impeded realization of effects

#### (1) Factors concerning to planning

Due to the implementation delays of Japanese grant aid due to unforeseeable security situation in Juba, the Project has difficulties in transferring the techniques so that JRPA staff can utilize the new facilities. Under the circumstances, the Project is conducting training in the existing facilities in order

for JRPS to correspond the new facilities.

(2) Factors concerning to the Implementation Process

Due to the outbreak of civil conflict in December 2013, it was broken up the JICA experts dispatch to the site. During this period, the activities were heavily limited and the expert team has prepared the necessary manuals in Japan.

#### 3-5 Conclusion

Although the Project could not be implemented according to schedule because of various matters mentioned at each section of this report, both individual and organizational level in the field of port management were enhanced. But still further efforts are necessary to achieve the Project Purpose and Overall Goal.

MTRB has been working on the legal system formulation regarding the river transport to contribute to the port activities. MTRB has been drafting such documents together with the expert on law to accelerate for urgent completion. It is afford to say that the Project has contributed for this legal aspect in deep. It's expected that the Government of South Sudan makes basic legal system for river transport be completed to make the project outcome fixed in the future.

It's requested that the South Sudanese side utilizes the technology and knowledge acquired by this project and comes into action continually to expand the project outcome and make them spread by the whole country level. The South Sudanese side's activities will be monitored once in a quarter of the year.

Both sides, South Sudanese and Japanese, should keep in touch to monitor the situation in order to spread the Outputs of the Project nationally to have a spillover effect widely.

Although the Project was heavily damaged by the deterioration in the security situation because of the delay of provision of facilities and equipment, the outsource occasions planned and instructed by the expert team, such as training outside of South Sudan, compiled manual for the necessary subjects were designed as much as possible to cover the loss and delay. The counterpart group also did not fall into depression and then tried to make the most of an opportunity. Both side has tried to reach the goal together under such circumstances. Such a sincere manner on both side should be appreciated.

#### 3–6 Recommendations

- (1) Short Term Recommendations to achieve the Project Purpose
  - 1) As the self-contained manuals were provided by the Project, the South Sudanese side is recommended to share the necessary items with the right personnel for further understanding and utilization both for the existing and new facilities and equipment to be improved by the grant aid project. Continuity is the most important awareness to improve the human competence.
  - 2) In a similar way as the Short Term Recommendation 1) mentioned above, it is necessary to secure the continuity of technical development by the port operation activities in the subject

which does not need special facilities and equipment.

#### (2) Long and Mid Term Recommendations to achieve the Overall Goal

There are various items to be fulfilled in order to develop the inland water transport, such as the port, vessel traffic lane, navigation rules and regulations, ship registration and inspection, ship's crew training and license, search and rescue system, pollution prevention, navigational aids, dredging etc. MTRB has been working for the River Transport Bill since long time; therefore such a legal system should cover all aspect related to the river transport in order to facilitate and enhance its capacity.

#### (3) Directionality of assistance in the future

Such as making river port policy (draft), river port legal system (draft) and JRPA operation manual which are not related to grant aid project, some outcomes were achieved to certain extent. On the other hand, it can't be put into effect yet about consideration of a smooth management of new Juba Port terminal, management and operation of Juba port based on the manual made by this project and tariff collection system, implementation of the check and maintenance of the facilities based on the manual, revision of the ledger, preparation and introduction of berth allocation system, because the grant aid project delayed and time of next tender has not been decided yet either.

Furthermore, the necessary number of C/P with the fixed ability was not allocated because of stagnation of logistics between North-South Sudan using barges due to worsened relationship of two countries, security situation deterioration in South Sudan, thus it can't also be put into effect about sharing of administration procedures on port operation established by the project to other ports in South Sudan, and improvement of port statistics database as well.

At present, river transportation of a humanity relief resource in South Sudan is performed by humanity support operation by United Nations (UN).

Regarding the above mentioned un-achieved items, and cooperation items to be implemented in succeeding project, they rely on the progress of following two items. Therefore, both sides collect the information on the following two points, and confirm the result and progress, and consider the contents of succeeding projects.

Condition of the consideration of the succeeding project has been confirmed as below.

- Conclusion of the contract agreement for construction works of the Grant Aid project "The Project for Improvement of Juba River Port"
- 2) Increase of cargo handling volume (Assume the number of barges recovers to the equivalent amount of 2011)  $^1$

### 3-7 Lessons Learned

(1) Sense of fellowship

<sup>&</sup>lt;sup>1</sup> According to hearing to WFP doing humanity relief resource logistics in South Sudan, Inland transportation of goods isn't performed smoothly because the situation of north region in South Sudan is bad and the actual transportation by barge since August 2014 is only 5 times.

This Project has a real difficulty to implement because of the difficult story mentioned repeatedly above. It means that the Project members of both South Sudanese and Japanese sides had heavy burden to work towards the achievement of the Project Purpose. Under such situation, the expert team has been trying to reduce distance with the counterparts by means of OJT method hand in hand. This kind of attitude has create the sense of fellowship between them. Undoubtedly, the expert team and counterparts have a trusting relationship with each other. This kind of output is also very much important in the ODA activity.

#### (2) Incentive and motivation

People works to enjoy life with desire to improve; however the situation in South Sudan has been deteriorated since the commencement of the Project. This is truly difficult story. Then, the expert team take the importance to keep incentive and motivation of counterparts into consideration for the planning of the Project, for example, training programs in the country and overseas, including in the third country, Kenya. Also OJT method was one of such ideas. Needless to say, the technical necessity should be first but some interesting factors may help to keep high incentive and motivation. This attitude has made various outputs from this Project climbing over the said difficulty.

## 3-8 Follow-up Situation

In the initial plan, the berth expansion and provision of cargo handling machine were expected to be completed by the Grant Aid project "The Project for Improvement of Juba River Port" during implementation of this technical cooperation project. In this technical cooperation project, the relevant port administration & operation manuals were developed for new facilities and equipment to be provided by the Grant Aid project and were supposed to be actually practiced, but the actual practice was not achieved because the construction work of Grant Aid project did not commence due to security deterioration. The Grant Aid project will be implemented in future but the timing is not yet in sight.

# 第1章 終了時評価調査の概要

#### 1-1 終了時評価調査の経緯・目的

2005年1月の南北包括和平合意(Comprehensive Peace Agreement: CPA)を経て、スーダン国政府とスーダン人民解放軍との50年にわたる内戦が終結した。そして、2011年1月9日、CPAに基づいて南スーダンの独立を問う住民投票が行われ、その結果、同年7月9日に南スーダン共和国(以下、「南スーダン」と記す)が誕生した。

南スーダンでは、日常生活に必要な物資の需要が急増し、インフラの開発が急務となり、周辺 国からの安定的かつ効果的な物流システムの確保が求められている。物資の円滑な流通により、 南北スーダン間に交流がもたらされ、和平促進に寄与するものと期待されている。南スーダン国 内においては、白ナイル川で結ぶ、首都のジュバ港と南スーダン拠点港のコスティ港間における 内水輸送が非常に大きな役割を担っている。

日本政府はこれまでに緊急開発調査やフォローアップ協力を通じ、ジュバ港における桟橋整備や資機材供与を実施してきた。さらに、無償資金協力事業「ジュバ河川港拡充計画」(以下、無償資金協力)では、桟橋(200m)、大型クレーン、上屋等の整備が計画されており、機械化荷役の本格導入による貨物取扱能力の増強が期待されている。また、南スーダン運輸省\*(Ministry of Transport/ Republic of South Sudan: MOT/RSS)、中央エクアトリア州政府インフラ省(Ministry of Physical Infrastructure/Central Equatoria State: MOPI/CES)は、ジュバ港の維持管理を目的としてジュバ港管理組織(Juba River Port Administration: JRPA)を共同で設立した。その JRPA 職員に対し、日本政府は港湾の維持管理に必要な初歩的な技術移転を緊急開発調査・フォローアップ協力において行った。\*運輸省(MOT)は2011年8月に運輸・道路・橋梁省(MTRB)に改編された。

このような背景の下、南スーダンはジュバ港の拡張プロジェクトにより供与される施設や機材を適切に維持管理していくために JRPA や関連機関の運営・維持管理能力を強化すること、また、ジュバ港で得られた知見を他の南スーダンの主要港と共有することを目的とし、日本政府に対して技術協力の要請を行った。この要請を受け、国際協力機構(JICA)は、2011年3月から4年間にわたり、技術協力プロジェクト「南部スーダン(現:南スーダン国)内水輸送運営管理能力強化プロジェクト」を実施することに合意した。今般、プロジェクト実施期間終了まで約3カ月となった段階で、プロジェクトの成果、達成状況を確認し、案件終了までの課題を整理し、プロジェクト関係者への提言を行うとともに、他の案件への教訓を得ることを目的として終了時評価調査を実施した。

#### 1-2 調査団の構成

終了時評価調査は、日本国側及び南スーダン側による合同評価委員会により実施された。おの おののメンバーは以下のとおりである。

### (1) 日本側団員(JICAより派遣された調査団)

担当分野	氏 名	所 属
総括	小柳 桂泉	JICA 社会基盤・平和構築部 運輸交通・情報通信グループ第二
		チーム主任調査役

評価分析	大前 正也	株式会社サクセス・プロジェクト・マネジメント・オフィス
		代表取締役

# (2) 南スーダン側団員

氏 名	所 属
Mr. Manyok Simon Chol	運輸・道路・橋梁省 内陸水運総局 政策調査オフィサー

# 1-3 調査日程

現地調査は 2015 年 4 月 5 日から 4 月 17 日までの期間で実施された。調査日程の概要は、以下のとおりである。

п	-		活動	j	مارا ک√ کین	
月	日	総括	司	7価分析	宿泊地	
4/5	日		ジュバ着 午後 日本人専門 合せ	家、JICA 南スーダン事務所との打	ジュバ	
4/6	月		午前 JRPA 施設初 午後 資料整理	見察、日本人専門家との打合せ	ジュバ	
4/7	火			ス設置起工式 をへのインタビュー 社へのインタビュー	ジュバ	
4/8	水		ビュー 州政府イン	・橋梁省河川交通局長へのインタ フラ省へのインタビュー へのインタビュー	ジュバ	
4/9	木		午前 日本人専門家へのインタビュー 午後 資料整理			
4/10	金		午前JRPA 事務 C/P へのインタビュー午後資料整理			
4/11	土		資料整理・報告書作成		ジュバ	
4/12	日	ジュバ着	総括・日本人専門家との打合せ ミニッツ他関連文書の確認 資料整理・報告書作成			
4/13	月		在南スーダン日本国大使館表敬 プロジェクト現場視察、日本人専門家との打合せ			
4/14	火		JCC 準備 JCC 開催			
4/15	水		WFP 面談 資料整理・報告書作成		ジュバ	

		午前	資料整理・報告書作成、総括 JICA 事務所での打合せ	ジュバ
4/16	木	午後	日本人専門家との最終確認、JICA 事務所報告、在南スーダン日	
			本国大使館報告	
4/17	金	ジュバ発		ジュバ

# 1-4 主要面談者(敬称略・順不同)

(1) 運輸・道路・橋梁省(Ministry of Transport, Roads and Bridges: MTRB/RSS)

Mr. Abdu Silye Mustafa Lako 内陸水運総局 局長

(2) 中央エクアトリア州インフラ省 (MOPI/CES)

Mr. Lino Schebesta D. Kenyi 運輸通信総局 局長

(3) ジュバ港管理組合 (JRPA)

Mr. Zubeir Taban 港長 Mr. Mr. Emanuel Matayo Eli 副港長

(4) 民間船会社

Mr. Mr. Jacob Daniel J. 顧問、NILE BARGES

(5) プロジェクト専門家

小山 彰 総括/港湾対策

長谷部 英司 安全管理(2)/保安/港湾荷役(3)

藤本 光弘 施設維持管理(土木)/研修計画(2)/業務調整(2)

池永 哲夫 施設維持管理(機材)

甲元 正臣 業務調整 (1)、港湾管理補助/研修計画 (1)

(6) 国連世界食糧計画 (World Food Programme: WFP) 南スーダン事務所

Mr. Alessandro Scaletti Head of Logistics

Ms. Nozomi Hashimoto Donor Relations Officer

(7) 在南スーダン日本国大使館

濱野 成 参事官 (アフリカ専門官)

石崎 妃早子 一等書記官

(8) JICA 南スーダン事務所

 古川
 光明
 所長

 小林
 知樹
 次長

#### 1-5 対象プロジェクトの概要

2011 年 5 月 4 日に開催された第 1 回合同調整委員会(Joint Coordinating Committee: JCC)で承認されたプロジェクト・デザイン・マトリックス(Project Design Matrix: PDM)Version 1(付属資料 1)に基づいたプロジェクトの要約は以下のとおりである。

- (1)協力期間:2011年3月1日~2015年2月28日(4年間)
   その後、2015年2月3日付の変更(Record of Discussions: R/D)により、協力期間を2015年8月31日まで延長。
- (2) 実施機関: MOT/RSS, MOPI/CES, JRPA
- (3) 対象地域:ジュバ港ほか南スーダン6港(ボル港、シャンベ港、アドック港、マラカル港、 マンガラ港及びレンク港)
- (4) 上位目標:南部スーダンにおいて内水輸送が円滑化され、輸送能力が拡大する。
- (5) プロジェクト目標:ジュバ港の港湾管理能力が強化される。 ジュバ港で構築された港湾管理手順が南スーダン各港間で共有される。

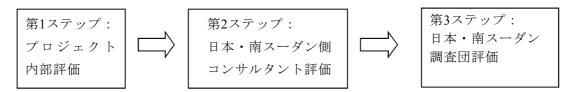
#### (6) 成果

- 1) ジュバ港管理組織(JRPA)の役割と責務が確立され、適切に機能する。
- 2) JRPA の予算・決算制度が確立される。
- 3) ジュバ港の施設が適切に維持管理される。
- 4) ジュバ港において安全で効率的な荷役が行われる。
- 5) ジュバ港が安全、安心かつ、環境にやさしく管理される。
- 6) ジュバ港の港湾統計データが収集され、更新及び港湾管理に活用される。
- 7) ジュバ港で蓄積された知識及び経験が南スーダン主要港職員間で共有される。

# 第2章 終了時評価調査の方法

#### 2-1 終了時評価調査のプロセス

本評価調査は、以下3つのステップにより実施した。



第 1 ステップでは、プロジェクトによる内部評価として、PDM 及び活動計画表(Plan of Operations: PO)に沿った活動・成果・プロジェクト目標実績表、上位目標の達成見込み、専門 家や機材・研修等の投入実績表が作成された。

第2ステップでは、日本・南スーダン国側双方の評価分析団員により、プロジェクト専門家をはじめとするプロジェクト関係者へのインタビューを実施し、その結果を基にプロジェクトの活動や成果等の評価及び分析を行った。

第3ステップでは、日本・南スーダン国側双方の調査団員による評価調査を実施した。第1ステップによる自己評価及び第2ステップによる評価分析結果を基に、評価5項目に沿って本プロジェクトのプロジェクト目標及び成果の達成状況を確認し、主に阻害要因に基づいた改善の方向性、提案等、提言の抽出を行った。その提言に基づき、具体的な軌道修正(PDM等)を行った。

#### 2-2 データ収集方法

日本・南スーダン国側双方による合同評価調査団は、PDM (終了時評価版) (付属資料 1 Appendix 01)、PO (付属資料 1 Appendix 02)、専門家業務完了報告書、プロジェクト関係者へのインタビュー、現地調査によりデータを収集した。なお、PDM (終了時評価版) は 2013 年 11 月に開催された第 5 回 JCC で承認された。

以下は、インタビューの対象者である。

- ・カウンターパート (MTRB/RSS, MOPI/CES, JRPA)
- ·民間船会社 (NILE BARGES)
- · 日本人専門家
- ・国連世界食糧計画 (WFP) 南スーダン事務所
- ・JICA 南スーダン事務所

#### 2-3 分析項目

(1) プロジェクトの実績の検証

PDM 及び PO に基づき、投入は計画どおり実施されたか (計画との比較)、成果は計画どおり達成されるか (目標との比較)、プロジェクト目標は達成されるか (目標との比較)、上位目標は達成の見込みがあるか (目標との比較) を検証した。

#### (2) 実施プロセスの検証

活動は計画どおりに実施されたか、プロジェクトのマネジメント体制に問題はなかったか、

相手国実施機関や C/P のプロジェクトに対する認識は高いか、プロジェクトの実施過程で生じる問題の要因や効果発現に影響を与えた要因は何か、などを検証した。

#### (3) 評価 5 項目

妥当性、有効性、効率性、インパクト、持続性の評価 5 項目によりプロジェクトの評価を 行った。

妥当性	対象地域・社会のニーズに合致しているか、ターゲットグループのニーズに 合致しているか、南スーダンの開発政策や日本の援助政策と整合性があるか、
	プロジェクトのアプローチは適切かなどを評価する。
	プロジェクト目標達成の見込みはあるか、プロジェクト目標を達成する阻害
有効性	要因はあるか、成果はプロジェクト目標を達成するために十分であるか、成果
有知生	からプロジェクト目標に至る外部条件は現時点においても正しいかなどを評
	価する。
	成果の達成度は適切か、成果達成を阻害した要因はあるか、成果を産出する
*** *** ***	ために十分な活動であったか、成果を産出するために十分な投入であったか、
効率性 	外部条件による影響はないか、計画に沿って活動を行うために、過不足ない
	量・質の投入がタイミングよく実施されたかなどを評価する。
	上位目標はプロジェクトの効果として発現が見込まれるか、上位目標を達成
	する阻害要因はあるか、上位目標とプロジェクト目標は乖離していないか、プ
インパクト	ロジェクト目標から上位目標へ至る外部条件は現時点でも正しいか、上位目標
	以外の効果・影響が想定されるかなどを評価する。特にマイナスの影響が想定
	される場合は、それを軽減するための対策がとられているかを検証する。
	プロジェクト目標、上位目標などのプロジェクトがめざしている効果は、協
持続性	力終了後も持続すると見込まれるかを評価する。それらの持続的効果の発現要
	因、阻害要因は何かを政策面、組織面、財政面、技術面の観点から評価する。

## 5項目は、下記のとおり5段階で評価される。

1	2	3	4	5
低い	概して低い	中程度	比較的高い	高い

# 第3章 プロジェクトの実績

#### 3-1 投入実績

2015年3月31日時点の日本側、南スーダン側の投入実績は以下のとおりである。

#### (1) 日本側の投入実績

#### 1) 専門家派遣

終了時評価調査までに以下 12 分野の専門家が派遣された。詳細は、付属資料 1 Appendix 3 を参照。

分野:総括/港湾対策、副総括/港湾行政(1)、港湾行政(2)/広報計画、港湾管理、港湾統計、港湾荷役(1)、港湾荷役(2)、安全管理(1)、安全管理(2)/保安/港湾荷役(3)、施設維持管理(土木)/研修計画(2)/業務調整(2)、施設維持管理(機材)、業務調整(1)/港湾管理補助/研修計画(1)

#### 2) 在外事業強化費

(通貨単位: JPY)

	フェーズ 1	フェーズ 2	フェーズ 3	
	2011年4月~	2012年4月~	2013年4月~	合計
	2012年3月	2013年3月	2015年6月	
執行金額	7,810,054	14,026,807	0	21,836,861
人件費	1,078,421	2,483,298	0	3,561,719
その他	6,731,633	11,543,509	0	18,275,142

#### 3) C/P 派遣(本邦・コスティ/スーダン国・モンバサ/ケニア国・カンボジア国研修)

派遣項目	研修期間	研修内容	参加
//\ZE /\	191 IS 791 Ind	191 3.d	人数
本邦研修	2011年11月22日~12月10日	準高級幹部職員対象とした港湾官	3名
		営運営全般	
	2012年11月11日~23日	JRPA 幹部クラス対象とした実地研	3名
		修	
	2014年8月12日~8月22日	港湾法制度、政策、内水輸送政策	6名
コスティ研修	2011年11月27日~12月3日	基礎港湾管理、取扱荷役管理、港湾	7名
(スーダン)		視察	
モンバサ研修	2011年10月24日~11月11日	法制度、港湾タリフ、安全荷役	4名
(ケニア)	2012年8月12日~9月7日	法制度、港湾タリフ、安全荷役	4名
	2013年2月4日~15日	法制度、港湾タリフ、安全荷役	4名
	2014年10月4日~19日	安全荷役	7名
カンボジア研修	2013年10月14日~18日	国際河川輸送規則、河川港関連中央	4名
		政府等の役割、港湾管理と河川輸送	
		課題	

#### 4) 供与機材リスト

(単位通貨: US\$)

	機材名	数量	計	購入日
1	ノート PC 1	1	900	2012年6月1日
2	ノート PC 2	1	900	2012年6月5日
3	ノート PC 3	1	2 220	2012年4月11日
4	ラップトップ PC	1	2,320	2012年4月11日
	合計	4,120		

(単位通貨:JPY)

	機材名	数量	計	購入日
1	光波距離計	1	1,000,000	2012年5月10日
2	オートレベル	1	80,000	2012年5月10日
3	測深用レットローブ	1	27,360	2012年5月10日
	合計		1,107,360	

(単位通貨: US\$)

	機材名	数量	計	購入日
1	セキュリティフェンス資材	1セット	50,950	2015年3月
合計		50,950		

## (2) 南スーダン側投入

#### 1) C/P 配置人数

プロジェクトに従事した C/P のタスクフォースごとの参加人数は以下のとおりである。 詳細は付属資料 1 Appendix 4 を参照。

	タスクフォース 1	タスクフォース 2	タスクフォース 3
所属先	(成果1と7)	(成果 2)	(成果 3-6)
MTRB	3	0	1
MOPI	2	2	0
JRPA	3	4	16
Total	8	6	17

#### 3-2 活動実績

プロジェクトの主な活動実績は付属資料 1 Appendix 7 を参照。

#### 3-3 プロジェクト目標の達成状況

各指標の達成度は以下の基準により判断する。

A: プロジェクト終了時までに十分達成される。

達成度 B:プロジェクト終了時までにおおむね達成されるが、一部未達成である。

C:プロジェクト終了時までに達成できない。

プロジェクト目標の達成見込みは以下に説明のあるとおりである。

#### プロジェクト目標 1: ジュバ港の港湾管理 港湾管理システムにはいまだ改善を要する点がある。プロジェクト最後の 専門家の現地活動において、ジュバ河川港管理運用マニュアルが提供され 能力が強化される。 た。当該マニュアルは既存及び新規の環境に対応した項目を網羅した内容 となっている。C/P は管理面から技術面までの港湾運営管理に係る当該マニ ュアルの活用に大変熱心である。当該マニュアルは専門家の渡航制限期間 のロスを埋め合わせるものである。新規施設の想定仕様と作成されたマニ ュアルを基に、可能な限り現実的なものとして効率的な新規施設の運営に ついて検討された。 2: ジュバ港で構築され 短期専門家による主要港へのアクセスは制限されていたため、代替案とし た港湾管理手順が南 て関係者をジュバ港に招へいした。しかし、南北物流中断と治安悪化によ スーダン各港間で共 りジュバ港以外の港の機能は制限されている。 有される。 指標 実 績 港湾管理能力にかかる状況は中間レビューから大きく変化していないもの 指標 1:B ジュバ港の新ターミ の、JRPA 職員の港湾管理能力は徐々に強化されており、総論的な港湾管理 手順等が徐々に構築されている。無償資金協力事業による施設整備の遅延 ナルが円滑に運営さ れる。 及びフェーズ 3 における短期専門家の渡航制限により、具体的な成果が達 成されるに至っていない部分がある。 ジュバ港、マラカル港、マンガラ港、シャムベ港、レンケ港には職員が配 指標 2:B 南部スーダン内の港 置されたものの、他の2港(アドック港とボル港)には配置されておらず、 プロジェクト期間終了までにジュバ港のノウハウが他の港で共有されるこ 湾職員の能力が向上 する。 とは困難である。 マラカル港、マンガラ港、シャムベ港、レンケ港の港長に対してジュバ港 において集中講義を実施し、港湾管理手法についての技術移転を実施した。

# 3-4 成果の達成状況

以下、PDM の成果の指標に対する実績について記述する。

以上、FDM の成本の相係に対する美額について記述する。		
S SM bala are too the	成果 1	
ジュバ港管理組織の	JRPA の役割と責務は、議論、セミナー、訓練を通じて確認され、関係者間	
役割と責務が確立さ	で役割と責務を定義する文書が作成された。これら役割分担と責務の運用	
れ、適切に機能する。	と定着については、無償資金協力事業の完工及び河川物流の回復を待つこ	
	となく、業務を進める必要がある。	
	運輸・道路・橋梁省(MTRB)は河川交通法策定を優先的に行っており、そ	
	の次に河川港規則が位置づけられている。MTRB は旧スーダンの法律と諸外	
	国の関連法を収集し、プロジェクトにより提案された法案を参考として制定	
	作業を進めている。法規の制定には時間を要する。MTRB はその重要性と緊	
	急性を十分に理解しているため、法律専門家による作業を進めている。	
指標	実績	
指標 1: A		
南部スーダンにおけ	セミナー、内外研修、ワークショップ(Workshop:WS)などを通じた技術	
る港湾管理法体系案	支援により、作業明細構造(Work Breakdown Structure: WBS)で指定さ	
の起草作業の進捗状	れている以下の文書類の整備は進んでいる。	
況。	1. 全国における港湾運営方針(案)	
	2. 法令の骨子 (案)	
	3. 港湾に係る基本的な法体系 (案)	
	4. JRPA の組織強化(案)	
	5. 各部局の所掌業務(案)	
	6. 各種業務マニュアル	
	起草した法制度案に基づき、法務省の法律専門家を交えた意見交換を開始	
	している。	
指標 2:B		
ジュバ港の管理運営	JRPA の組織強化については、所掌業務明確化の支援や各部署の業務マニュ	
業務に係るマニュア	アルを作成した。	
ルが作成される。		

	成果 2
JRPA の予算・決算制	必要な項目についてはすべて議論されマニュアルに取りまとめられた。し
度が確立される。	かし無償資金協力事業の施設・機材の実際の手順については、実際に供与
	された時点で適用されなければならない。プロジェクトは想定手順を考慮
	し、想定と実際の状況の双方について業務を行った。
	財務省に対する予算要求の試みとして、JRPA はプロジェクトと無償資金協
	力事業の円滑な実施に係る予算要求をした。しかし治安悪化のため、この
	予算は執行されなかった。

指標	実績
指標 1 : B	港湾管理者としての予算・決算制度については説明し理解を得られている
予算要求資料を作成	ものの、法制度との関係から制度構築には時間を要する(項目は、1. 港湾
し、予算が要求され	管理主体は独立した会計を有すること、2. 港湾収入は港湾管理に使用され
る。	るべきこと、3. タリフの設定方法、徴収方法、4. 会計規則、タリフ委員
	会規則)。
指標 2:B	JRPA の収支状況、施設・機材の利用状況の把握、分析のうえ、港湾会計シ
港湾タリフ(利用料金	ステムに係る指導を行っている。その結果として、既存施設を前提とした
表)案が起草される。	タリフ (案)、貸付規則 (案) を検討し、施設の全面的供用開始に伴う本格
	的予算・会計システム設計を支援している。
指標 3:B	港湾タリフや貸付規則の例示(あるいは案は)は存在するが、実施に移せ
施設等の貸付に関す	る状況に至っていない。
る規則案(約款等)が	
起草される。	

	成果 3
ジュバ港の施設が適	施設、機材維持管理のための検査マニュアル及び港湾施設台帳は作成され
切に維持管理される。	た。無償資金協力事業完工後の新しい施設、機材への適用が必要であり、
	C/P はプロジェクトにより得られた能力の研鑽を継続しなければならない。
	マニュアルに沿った既存の施設、機材に係る検査と維持管理方法について、
	C/P は習熟している。これら技能と知識は新規施設と、機材が整備された後、
	適応されなければならない。
	JRPA の維持管理職員はバース水深測定、モニタリングの重要性を理解し、
	その測定方法にも習熟している。さらに定期的な計測記録とデータベース
	化についての指導も行われた。
	本格的な港湾運営に向けた貨物量は不十分であるものの、既に習熟した検
	査及び維持管理業務は適切に実施しなければならない。
	既存施設、機材の検査、維持管理に係る熟度は中程度であるが、新規施設、
	機材に必要なレベルに達するためには、更なる技術指導が必要である。
指標	実績
指標 1: A	
施設点検マニュアル	既存施設及び新規施設の点検マニュアル作成済み。
が作成される。	
指標 2: C	
作成されたマニュア	オンザジョブ・トレーニング(On-the-Job Training: OJT)による既存桟橋
ルに基づき施設の点	補修を通して維持管理の手法が身についた。
検・補修が実施され	OJT による小規模な構造物構築の演習を通して維持管理の手法が身についた。
る。	既設桟橋の維持管理点検はマニュアルに基づいて実施している。他の点検
	項目については、新規施設・機材を利用してマニュアルに準じて習得する
	必要がある。

指標 3:B	
施設台帳が整備、管理	管理台帳は作成済み。
される。	
指標 4:A	
ジュバ港のバース水	JRPA 維持管理職員 3 名が測量機器(光波測距儀・オートレベル・測深用レ
深が測定・記録され	ッド)を用いて既存桟橋の健全度について確認することができるようにな
る。	った。

成果 4		
ジュバ港において安	荷役とバース調整システムに必要な項目については、OJT とマニュアル説	
全で効率的な荷役が	明を通じて既存港湾環境については一定レベルまでは完了している。しか	
行われる。	し多量の物流に対応する能力の評価については時期尚早である。新規施設、	
	機材の習熟と業務用途に係る実習訓練が必要である。	
指標	実 績	
指標 1:B		
新施設対応荷役マニ	新規導入予定の荷役機械(大型クレーン、フォークリフト、ベルトコンベ	
ュアルが準備される。	ア等)を想定し、基本事項を指導し、荷役作業のポイント、効率性につい	
	ての指導は終了。既存及び新規施設・機材についての荷役作業マニュアル	
	作成済み。	
	クローラークレーンについては、マニュアルによる指導は完了しているも	
	のの、納入後の実技指導が必要である。	
指標 2:B		
バース調整システム	JRPA 及び船会社等の港湾利用者に対して工事中や新規建設のバース調整に	
が準備・導入される。	ついて指導し、無償工事の内容が明確になるのに併せてシステム導入のた	
	めの指導を実施した。また現行の港湾活動に対する出入港手続き、バース	
	調整計画を導入し、港湾関係者間で試行を進めた。	
指標 3:B		
荷役サービス規則案	上記、荷役作業マニュアルに含まれる。	
が作成される。		
指標 4:A		
コンテナ荷役効率の	モバイルクレーンを活用した実際のコンテナ荷役作業の状況をビデオ撮影	
改善方法が示される。	してその問題点を指摘しつつ、より安全に荷役する方法、関係者による安	
	全会議の開催などを提案する教材として取りまとめ、安全な荷役作業の徹	
	底に資するものとした。	

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	成果 5
ジュバ港が安全、安心	成果3及び4と同様に、すべての活動は本格的な運用に向けた施設、機材
かつ、環境にやさしく	の導入を待っている。港の新しい環境に即して準備されたマニュアルを基
管理される。	に、実際の運用の確認が必要である。新しい環境において修正点があった
	場合には、実用的なものとするために追加支援が必要と考える。
指標	実績
指標 1:B	
港湾関連サービスの	港湾関連サービス供給者に対する規則案は完成しており、今後現地の状況
供給者に関する規則	(法制度整備及び施設整備等) に併せて導入検討が望まれる。
が起草される。	
指標 2:B	
港湾内の保安計画案	港湾保安・安全管理に関しては、港湾保安の概念、用語、事例の説明・紹
が作成され、研修及び	介を通じて新規施設に対応する計画作成準備実施。新規施設用の港湾施設
訓練が実施される。	保安計画(Port Facility Security Plan: PFSP)作成に必要な、港湾施設保安
	アセスメント(Port Facility Security Assessment: PFSA)について指導し、
	既存施設での現場訓練を実施した。新規施設用の PFSP をフェーズ 3 で策定
	し、業務マニュアルに加えた。
	JRPA は ID カードを用いたアクセスコントロールを近々導入する予定であ
	る(2015 年 5 月)。
指標 3:B	
消火・消防計画書が作	消火・消防訓練計画書についてはフェーズ 1 で対応済みであり、 CES 消防
成され、訓練が実施さ	本部及び港湾関係者が参加した消火実務訓練を実施した。新規施設用の消
れる。	防計画書をフェーズ3にて策定し、業務マニュアルに加えた。
	焼却炉の設置、小型船火災への対応などを指導し、港内清掃と防火意識の
	向上が見られた。
指標 4:B	1,000
油流出等災害に対す	油流出等災害に対する危機管理計画書(Oil Spill Management Plan:OSMP)
る危機管理計画書が	については、フェーズ1で作成した計画を基本に、新規施設用の OSMP を
作成される。	フェーズ3で策定し、業務マニュアルに加えた。
指標 5 : B	
油流出災害等を想定	プロジェクト前半においては、油流失災害を想定した机上訓練が行われた。
した訓練が実施され	現場訓練として、オイル吸着マットやオイルフェンスを用いた油流出対策
る。	の訓練を実施した。
. ∽ 0	Y/ P/II/NN と 大ルE レバC O

	成果 6		
ジュバ港の港湾統計	港湾統計データの収集及び処理に努めたものの、南北物流の中断によりデ		
データが収集され、更	ータ量は過少なものであった。成果6の活動は無償資金協力事業完工を待		
新及び港湾管理に活	つ必要はないものの、以前の貨物量またはそれ以上を必要とする。		
用される。	作成された港湾統計データ収集及び処理に係るマニュアルにより指導が実		
	施された。データ処理フォーマットもエクセルを活用して作成された。不		
	十分な貨物量ではあるが、担当 C/P は熱心にこのシステムの習熟に取り組		
	んでいる。彼らの学習及び活用に対する意欲については、高く評価できる。		
	簡易な港湾統計書については、フェーズ2で作成された例を使って、再度		
	指導した。		
指標	実績		
指標 1:B			
港湾統計データ収集	手書きで記録していたデータの様式を電子化し、データ取得方法を技術指		
マニュアルが作成さ	導済み。統計データが港湾の管理運営に果たす役割など、港湾統計の目的		
れる。	に言及し、理解が得られている。		
	南北の物流が途絶えていることから限られたデータしか得られていない		
	が、物流が活発化した場合に備えて、既に作成済みの"Manual for Port		
	Statistics"をフェーズ3で指導した。		
指標 2:B			
統計データベースが	エクセルアプリケーションによりデータベース様式を作成し指導済み。現		
整備、利用される。	在、作成したエクセルアプリケーションを利用して統計データベースを定		
	期更新している。		
指標 3:B			
簡易な港湾統計書が	簡易な港湾統計書の作成方法についてフェーズ3で指導した。		
取りまとめられる。			

	成果 7
ジュバ港で蓄積され	南北物流中断と治安悪化によりジュバ港以外の港の機能は制限されている。
た知識及び経験が南	したがって、成果7の活動である「ジュバ港で蓄積された知識及び経験が南
スーダン主要港職員	部スーダン主要港職員間で共有される」については、主としてジュバ港にお
間で共有される。	いて実施した。また同様の理由により専門家の各港へのアクセスも制限され
	た。
HA 135	
指標	実績
指標 1:B	実 績
	実 績 ジュバ港以外の港湾の状況把握、技術移転は、職員が配置されていない、治
指標 1:B	
指標 1:B ジュバ港以外の港湾	ジュバ港以外の港湾の状況把握、技術移転は、職員が配置されていない、治

指標 2:B	
ジュバ港以外の港湾	ジュバ港において、地方の河川港の港長4名及びUpper Nile 州の職員3名に
管理組織からの研	対して「地方港湾職員研修」を実施した。
修・セミナーの参加	マラカル港、マンガラ港、シャムベ港、レンケ港の港長に対してジュバ港に
者数	おいて集中講義を実施し、港湾管理手法についての技術移転を実施した。

#### 3-5 上位目標の達成見込み

上位目標の達成見込みは以下のとおりである。

工匠自保の建成元色のではありでありてめる。		
上位目標		
南部スーダンにお	南北スーダンの関係悪化による国際河川物流は停滞しており、内航の国連の	
いて内水輸送が円	支援物資や帰還難民の移動、及び小型のボートによる物流に限られており、	
滑化され、輸送能力	至近に輸送能力が大きく拡大する可能性は低い。ただし、南北スーダンの関	
が拡大する。	係が改善すれば物流は急速に拡大すると思われることから、上位目標の達成	
	見込みは中程度と判断する。	
	上位目標達成には、まず無償資金協力事業によるジュバ港の施設・機材の拡	
	充、本プロジェクト協力対象港の整備及び更なる制度整備、人材育成が必要	
	である。	
指標	実 績	
指標 1:	終了時評価が行われた 2015 年 4 月より前の 2014 年は南スーダン全土で内戦	
南部スーダン内港	が行われており、通常の港湾運営ができず、取扱貨物量及び荷役効率に関す	
湾の取扱貨物量及	るデータを入手することは困難であった(C/P へのインタビューによると、	
び荷役効率が向上	実際に貨物量はほとんどなかったとのこと)。現在もジュバ以外の地方では情	
する。	勢が落ち着いておらず、現時点においても取扱貨物量は限定的であり、荷役	
	効率の向上を図るだけの量に至っていない。	
指標 2:		
南部スーダン内港	成果7で述べたとおり、南スーダン国内の港に適切に人員が配置されない限	
湾のサービス水準	りは、港のサービス水準を測ることは難しい。	
が向上する。		

#### 3-6 実施プロセスの検証

(1) 計画に基づいた活動の実施

2013年12月の情勢悪化により、専門家の派遣が中断した。専門家グループは本邦において、必要事項の可能な限りのマニュアル化作業を行い、フェーズ3の限られた時間のなかでの技術移転を実施している。

#### (2) オーナーシップ

日本人専門家へのインタビューによると、フェーズ1の中盤までは、JRPA 職員は港湾の 役割や存在意義に関する認識が不足していたが、プロジェクト活動を通じて意識の変化がみ られ、徐々に主導権をもって活動を実施するようになった。現在、南スーダン側プロジェク ト関係者は、積極的に港湾の維持管理に関するより多くの知識や技能を身につけようとしている。

#### (3) コミュニケーション

プロジェクト期間中に、日本人専門家と C/P との間で情報を共有し、プロジェクトにおける重要事項の意思決定を行うための会議が何度も行われた。これにより、C/P とのコミュニケーションを比較的円滑に行うことができ、相互理解が進み、協力関係が構築されつつある。また、OJT も良好な相互関係を促す要因の 1 つとなっている。

#### (4) PDM の変遷

第1回合同調整委員会(2011年5月)において、PDMの指標は以下のとおり修正された。

	修正前(PDM Ver.0)	修正後(PDM Ver.1)	変更点
	Cargo throughout per hour	Cargo throughout per month	修正
	Average queuing time of Vessels		削除
+15 +145		Average berthing periods of vessels	
指標		The number of accidents,	\ <u></u>
		injured persons and damages	追加
		of cargos at Juba port	

中間レビュー結果を受け、第4回 JCC(2013年2月)において、PDM の指標、入手手段及び活動は以下のとおり修正された。

	修正前	修正後	変更点
	• Operation manuals of Juba port are prepared.	• <u>Institutional operation manuals</u> of Juba port are prepared.	修正
指標	<ul> <li>Cargo throughput per month</li> <li>Average berthing periods of vessels</li> <li>The numbers of accidents, injured persons and damages to cargo at Juba River port</li> </ul>	<ul> <li>Drafting cargo handling manual for new facility and application on actual harbor work at Juba Rive Port.</li> <li>Development of berth allocation system and its application at Juba River Port</li> <li>Drafting regulation on cargo handling activity</li> <li>The number of containers handled per hour</li> </ul>	修正
指標入手手段	• Interviews to the counterparts and port users	<ul> <li>Draft of cargo handling manual</li> <li>Interview to the counterparts and users on berth allocation</li> <li>Draft of regulation of cargo handling activity</li> <li>The number of containers handled per hour</li> </ul>	修正
活動 1-6	To prepare <u>operation</u> <u>manuals</u> at each manuals     department of JRPA	To prepare institutional <u>operation manuals</u> at each manuals department of JRPA	修正
活動 1-8		• promote public relations	追加
活動 4-5	• To establish berth <u>adjustment</u> system at Juba  Port	• To establish berth <u>allocation</u> system at Juba Port	修正

第 5 回 JCC(2013 年 11 月)において、PDM の指標、入手手段及び活動は以下のとおり修正された。

及び 及び 

# 第4章 評価5項目

#### 4-1 妥当性

南スーダン側の政策やニーズ、日本の南スーダンに対する援助方針、また、プロジェクトアプローチの観点から、妥当性は「比較的高い」といえる。

#### (1) 南スーダンの政策との整合性

南スーダンの 2013 年から 2017 年の「運輸分野方針」(MOT/RSS, April 2013) は、効率的な物流網の確立、安全な運輸サービスの提供、MTRB の運営能力強化の重要性などを基本政策として掲げている。CPA によって定められた暫定期間 6 年 (2005~2011 年) の南北スーダン開発の枠組み「スーダン合同評価ミッション報告書」においても、運輸・交通開発、インフラの整備は優先課題として位置づけられている。さらに河川輸送については、「南スーダン開発イニシアティブ 2013-2020」(2013 年 1 月) において、河川輸送に係るインフラ整備、航行援助施設整備、河川輸送サービスに係る法整備に高い優先順位を設定しており、河川輸送に従事する職員の訓練プログラム開発を重要視しており、その開発と実施に技術支援が必要である旨、示されている。

#### (2) わが国の対南スーダン援助方針との整合性

わが国の対南スーダン援助方針との整合性に関しては、2012 年 6 月、日本政府は対南スーダンの事業展開計画で 2 つの重点開発課題(1.インフラ整備、2.ガバナンス能力強化)を掲げている。上記に基づいて策定された協力プログラム「インフラ整備プログラム」を通じて、首都ジュバを中心とした持続的な経済成長を下支えするインフラ整備を支援し、地域格差是正による平和定着に向け地方での取り組みを強化していくこととしている。本プロジェクトは、内水輸送の運営管理能力向上を通じて安定した物流サービスを確保して南スーダン内の地域格差是正につながるものであり、これらの観点からわが国の南スーダン援助方針と合致する。

#### (3) 対象地のニーズとの整合性

南スーダンでは、独立後の急速な開発に伴い、ジュバ港をはじめとする各港において取扱貨物量の増加が見込まれている。しかしながら、南スーダンとスーダン国間の物流が減少・停滞していることから、貨物量は減少している現状である。その原因となっている両国の関係が改善されれば、貨物量の増加は見込まれると考えられる。よって、港湾管理運営能力を向上させることは必要不可欠であり、貨物量増加に備えて、対象港においてプロジェクトを実施するニーズは高い。

国内産業の発展以前に、国連の支援物資の輸送、帰還難民の移送に河川輸送は重要であり、スーダン国との物流の停滞によりバージ船での貨物輸送は減少しているが、小型ボートによる物流は食料、生活物資などの輸送に寄与している。スーダン国との関係が改善されれば、河川輸送貨物量は増加が見込まれるため、現状のベーシック・ヒューマン・ニーズ(Basic Human Needs: BHN)対応に加えて産業振興に貢献することが期待される。

他輸送モードとの比較データはないが、劣悪な道路整備には相応の期間を要することが考

えられるため、本プロジェクトで支援した南北河川輸送の重要性は高い。

#### (4) プロジェクトデザインの適切性

「緊急開発調査及びフォローアップ協力」、「無償資金協力」、「課題別研修」のすべてがおのおのインフラ整備、機材許与、人材育成を有機的に組み合わせて実施されており整合性は確保されている。そのなかで「無償資金協力」による施設・機材整備の遅延は本プロジェクトの大きな阻害要因となっている。

#### 4-2 有効性

有効性については「やや低い」といえる。

#### (1)「プロジェクト目標」の達成度

現状で確保できていない外部条件がプロジェクト終了時まで続いた場合、プロジェクト目標の達成度は低い。プロジェクト目標1に関して、OJT及び他の活動に参加したJRPA職員の能力は強化され、港湾維持管理、運用に係るインセンティブは強化された。この活動が継続される場合には、JRPAの管理能力は向上するであろう。他方、プロジェクト目標2に関しては、対象とする港に十分に職員が配属されなかった。実質的に機能していないジュバ港以外の各港へ配属される予定の職員に対しては、ジュバ港での指導により対応したが、実際の運用には至っていない。

#### (2)「成果」から「プロジェクト目標」の達成に対するロジック

JRPA の管理能力が強化されたことに関する成果 1~6 により、プロジェクト目標は達成されることが想定される。さらに、成果 7 による活動を通じて OJT その他の活動により蓄積された知識と経験により、プロジェクト目標 2 は達成されるであろう。したがって成果からプロジェクト目標への論理性は確保されているということができる。

#### (3)「成果」から「プロジェクト目標」に至る外部条件

#### 外部条件1:一定の能力をもった C/P が必要数配置され、頻繁に異動、離職しない

プロジェクト開始当初からの C/P の退職、辞任はみられないが、各港への人員の配置については、前提条件「南スーダンにおいて治安状況が大幅に悪化しないこと」が満たされなかったために各港の機能がほぼ停止状態となり、人員配置は不十分となる結果となった。

# 外部条件 2: ジュバ河川港拡充計画 (無償資金協力) が予定から大幅に遅延することなく実施される

無償資金協力事業により整備される荷役のための新しい施設を効果的かつ適切に活用し、 JRPA の管理能力を強化することが目的の 1 つである。本プロジェクトで、既存の施設のみならず、新規施設に対応できる技術移転を行ったものの、1 年半以上にわたって、当該無償資金協力事業は遅延したため、十分な技術移転を行うに至らなかった。

#### (4) プロジェクト目標達成による対象課題への裨益効果

年間7カ月に及ぶ雨期によって広大な地域が水面下となる地理的要因により、内戦前に記録されたように国内貨物量の60%が河川交通に依存しており、道路による物流は困難である。これは河川交通が年間7カ月の生命線といえる。さらに安価かつ大量な輸送は河川交通の利点である。

#### 4-3 効率性

専門家の渡航制限があったものの、可能な代替案を活用することにより、できる限りの成果を 達成していることから、効率性は「中程度」と判断される。

専門家の質については C/P からの聞き取りでは高く評価されており、実績については、大規模港湾から河川港までの多様性に対応している専門家集団であるため、客観的にも高く評価される。しかし量・タイミングについては、南スーダン側の事情である治安悪化による 2013 年 12 月から2015 年 3 月までの専門家派遣延期はプロジェクトの進捗に大きく影響した。専門家による現地活動ができない期間を利用して各専門家によりマニュアルが整備され、このマニュアルによる技術指導により、当該延期期間中の遅れを少しでも取り戻すべく 2015 年 3 月~4 月にかけて最後の現地活動が実施された。無償資金協力事業との遅れにより連携ができなかったことは、結果として専門家の投入のタイミングという観点から効率性に欠けたといわざるを得ない。

光波距離計、オートレベル、測深用レッドロープ、パソコン等の機材を調達し、プロジェクト活動に活用しており、最低限の投入により機材面に係る技術指導は完了した。しかし無償資金協力事業による施設・機材に係る技術指導は実施できなかった。また当初は計画されていなかったが、港内の治安維持のためのセキュリティフェンス用の資材を調達し、現在設置工事中であり、完工すれば、港内の治安維持に資する。

プロジェクトサイトには十分な施設・機材が整備されていないため、本邦及び第三国(ケニア、カンボジア)での研修は、各課題(管理レベルの法整備から実務レベルの機材運用習熟まで)に対応しており、現地では経験のできないレベルであるとともに、無償資金協力事業による施設・機材が整備された状況を想定した研修であった。

各港への人員配置については、ジュバ以外の港の安全性及び物流の停滞を考慮してプロジェクトのスケジュールに合わせた配置はできなかったが、ジュバでの技術指導の成果は、今後、他の港が稼働し始めた際に各港で活用されることを想定している。

#### 4-4 インパクト

上位目標の達成には相応の時間が必要であるものの、複数の正のインパクトが確認された。以下の観点から、終了時評価時において、プロジェクトのインパクトは「中程度」と判断できる。

#### (1)「上位目標」の達成見込み

南北スーダンの関係悪化により国際河川物流は停滞しており、内航の国連の支援物資や帰還難民の移動、及び小型のボートによる物流に限られ、至近に輸送能力が大きく拡大する可能性は低い。ただし、南北スーダンの関係が改善すれば物流は急速に拡大すると思われることから、上位目標の達成見込みは中程度と判断する。

(2)「プロジェクト目標」から「上位目標」に至る外部条件

外部条件1:港湾開発に係る財源が確保される。

南スーダンとスーダンの関係はプロジェクト開始直後に悪化し、南スーダンが石油の輸出 を停止したことにより、石油生産による歳入が減少した。このような状況により、現時点に おいて外部条件1は満たされているとはいい難い。

#### 外部条件2:港湾開発に係る政策が大幅に変更されない。

南スーダン政府へのインタビューや質問票の回答結果によると、南スーダン政府は物資輸送を円滑に行うためには、港湾管理者の管理能力を強化することが最も重要だと認識している。実際に運輸分野方針や開発イニシアティブでも河川交通発展は重要課題の 1 つとして設定されており、今後も港湾管理政策がネガティブに変更される可能性は低いといえる。

#### (3) 予期しなかった正の影響

予期しなかった正の影響は以下の3点が挙げられる。

- 1) 最も顕著な影響は、南スーダン側が法律よりも政策が重要であることに気づいたことである。政策の整備は PDM に記載されていなかったが、南スーダン側の意向を汲んでプロジェクト実施中に新たに活動に取り入れた。現在、南スーダン政府の MTRB が、優先課題として運輸政策、河川港政策を策定中である。
- 2) 次に、統計処理、会計等、港湾管理に必要なパーソナルコンピュータ能力の向上である。 プロジェクトチームは関連活動実施に必要な活動として追加し、専門家の指導により、他 の C/P に指導できるレベルまで達した。
- 3) プロジェクト活動を通じて、問題・課題を自ら解決しようという JRPA 職員の意識が高まっており、主体的に活動を行うようになってきた。また、OJT により JRPA 職員の港湾の運営管理能力も徐々に強化されつつある。今後は、高まった JRPA 職員の意識を持続させていくことが期待される。

#### 4-5 持続性

政策的側面における持続性は確保される見通しがあるものの、組織的側面、財政的側面及び技術的側面等における持続性の確保には以下のとおり課題が残る。持続性は、これらの観点から「中程度」と判断される。

#### (1) 政策、組織、制度面

南スーダンの「運輸分野方針」(GOSS/MTR, 2007)は、効率的な物流網の確立、安全な運輸サービスの提供、MTRBの運営能力強化の重要性などを基本政策として掲げている。また、MOT/RSS は国内の内水輸送を円滑に行うために、港湾能力を向上させることが非常に重要であると感じており、また、南スーダン政府は今後も運輸・交通システムの整備による南スーダンの人々の生活向上に寄与する政策を実施していくとしている。方向性については持続性が確保されているといえるが、各論での政策立案、組織改編、制度改革などの方法論については、自己完結できるレベルとはいい難く、ドナーによる支援等が必要であると考えられる。

#### (2) 財政的側面

南スーダンはスーダン国への石油輸出を停止しており、石油収入が激減している。さらに、 高額の支出が必要な港湾施設、浚渫などへの予算措置は困難である。

#### (3) 技術的側面

PDM で指定されているすべての成果に係るマニュアル (Juba River Port Administration Operation-Manual) が現地での活動の不足を充足する目的で専門家チームにより作成された。 今後は、南スーダン側がこのマニュアルを活用して適切な港湾運営管理業務を行うことにより、プロジェクト終了後の成果の継続的な維持が期待される。

【参考: 当該マニュアル"Juba River Port Administration Operation-Manual"目次】

- 1. General Affairs and Administration Department
- 2. Budget and Accounting Department
- 3. Operation and Statistics Department
- 4. Risk Management and Environment Department
- 5. Mechanical Cargo Handling Department
- 6. Maintenance Department

上述のマニュアル "Juba River Port Administration Operation-Manual" が C/P に十分に理解され、更に新たに配属される職員や人事異動の際の後任職員と共有されることにより、このマニュアルが実施機関内で定着することが期待される。しかし現状では新規施設・機材については、それらが整備されることを想定しているにすぎず、実際に新規施設・機材整備が完了した時点で、マニュアルの定着度を確認する必要があると考える。

#### (4) 人的資源面

2011年に独立したばかりであり、プロジェクト実施期間中に内戦状態に陥り、河川物流の停滞、無償資金協力事業の遅延など、不安定要素が多いなか、オーナーシップは必ずしも高いとはいいきれないが、そのような過酷かつ不確定要素の多い環境下において、ワーキンググループ、ワークショップ等により構成されるタスクフォース活動やプロジェクト実施途中から導入された OJT 活動に C/P は積極的に参加し、技術習熟に努めたことなど、プロジェクトに対する姿勢は評価できると思われる。職員配置の継続性については、中央政府では人事異動があるものの、実務レベルの TF3 (港湾荷役及び運営関係) においては顕著な異動はみられない。

このように人的資源面においては、JRPA 及びジュバ港においては、員数と質については 持続性がある程度確保されているといえる。課題は河川物流が活性化し、各港湾機能が復活 した際に、移転された技術を地方港に効率的に導入する技能の確保である。

#### (5) 持続性確保のための現状モニタリング手法

持続性確保のために、以下の項目についてのモニタリングと日本・南スーダン国側双方で 状況の共有が必要であることを確認した。南スーダン側が四半期に1度、JICA南スーダン事 務所に報告し、JICA本部に共有されることとした。

①河川港政策及び規則の承認状況

- ②タリフ委員会の設置状況
- ③水位の定期観測
- ④機材台帳の定期的更新
- ⑤バージ船の入出港記録
- ⑥通常業務としての港湾区域の定期清掃

# 第5章 結論

プロジェクトは予定どおりに実施できなかったものの、港湾管理の分野においては個人及び組織の能力が向上した。しかしながら、プロジェクト目標及び上位目標達成のためには更なる努力が必要である。

MTRB が取り組んでいる内水輸送の法体系の整備に関し、本プロジェクトは大きく貢献した。 今後、本プロジェクトの成果を定着させるために、南スーダン政府が内水輸送のための基本的法 体系を完成させることが期待される。

本プロジェクトの成果を拡げ、全国レベルで波及させるためには、南スーダン側が本プロジェクトで習得した技術・知識を活用して継続的な活動を行うことが求められる。南スーダン側の活動については、四半期に1度行うモニタリングで注視したい。

本プロジェクトは外部条件に大きく影響を受けたものの、国外での研修や、業務マニュアルの作成など、南スーダン国外での協力がプロジェクトチームにより計画・実施された。このような状況下でも、日本・南スーダン国側双方がプロジェクト目標達成のために真摯に努力したことは評価される。

# 第6章 提言

- (1) プロジェクト目標達成のための短期的提言
  - ①本プロジェクトで作成した業務マニュアルなどを、既存の施設・機材及び無償資金協力事業で整備予定の新たな施設・機材の運営・維持管理のために適切な人材と共有すること。
  - ②現状の施設・機材を前提とした港湾運営活動により、技術力向上への継続性を確保すること。

#### (2) 上位目標達成のための中期・長期的提言

内水輸送向上のためには、港のみならず、航路、航行規則、船舶登録・検査、船員訓練及び免許付与、捜索救助、汚染対策、航行援助設備、浚渫などさまざまな事項が整備される必要がある。MTRB が内水輸送の法体系整備に取り組んでいるが、その法体系はこれら事項を包含すべきである。

#### (3) 今後の支援の方向性

本プロジェクトにおいて、無償資金協力事業に関連していない河川港政策(案)、河川港法体系(案)、JRPA業務マニュアルを作成するなど、一定の成果は達成された。一方で、無償事業の開始時期のめどがたたない状況であるため、ジュバ港新ターミナルの円滑な運営方法の検討、作成したマニュアルや料金徴収体系に基づいたジュバ港の管理運営、マニュアルに基づいた施設の点検・補修の実施、施設台帳の更新、バース調整システムの準備・導入などの項目についてはいまだ実施できていない。無償事業の次の入札時期も定まっていない。

また、南北スーダンの関係悪化による、南北スーダン間のバージ船等の河川物流の停止、情勢悪化などの事由により、一定の能力をもった C/P が必要数配置されないことから、ジュバ港で構築された港湾管理手順の南スーダン各港での共有、統計データベースの整備等の項目についても実施できていない。

一方で、現在、国連の人道支援オペレーションにより南スーダン域内における人道支援物資の 河川輸送は行われている。

上述の未着手の項目、後継案件で実施すべき協力内容などは、以下の 2 点の進捗状況に寄る部分が大きい。よって、本プロジェクト終了後に以下の 2 点について情報収集を行い、それらの結果や進捗を確認した後に、その時点で改めて後継案件の協力内容を検討することとした。検討開始にあたっての条件を以下のとおり設定した。

- ①無償資金協力事業の工事契約の締結
- ②貨物取扱量の増加(バージ船の数が 2011 年の水準まで回復すること) 1

<sup>&</sup>lt;sup>1</sup> 南スーダン国内の人道支援物資輸送を行っているWFPへのヒアリングによると、南スーダン北部地域の情勢が悪いため内水 物資輸送は順調に行われておらず、2014年8月以降のバージ船による輸送は5回のみとのこと。

# 第7章 教訓

#### (1) 仲間意識

本プロジェクトは繰り返し述べてきた困難な条件下で実施された。この事実は日本・南スーダン国側双方のプロジェクトメンバーにプロジェクト目標達成に向けた多大な負担を強いることとなった。このような条件下、専門家チームは OJT を取り入れることにより、C/P との距離を縮め、仲間意識をもつことに努めた。これは ODA 活動において大変重要な成果ということができる。

#### (2) インセンティブと意欲

南スーダンにおいてはプロジェクト開始から状況は悪化し続けた。この困難な状況を少しでも克服するために、専門家チームは C/P のインセンティブと意欲を維持するために、国内、ケニア等の第三国での研修など、プロジェクト計画に工夫をした。また OJT 活動もその観点からである。いうまでもなく、技術的な必要性が大切であるが、インセンティブと意欲を確保するために心理的な要因が、困難な状況下では多くの成果を発現するために必要である。

# 第8章 フォローアップ状況

当初予定では、本技術協力プロジェクト実施中に、無償資金協力事業「ジュバ河川港拡充計画」による桟橋拡張、荷役機械の整備が完了する予定であった。本技術協力プロジェクトでは、それら無償により整備される新施設・機材の運用維持管理を想定したマニュアル類を整備し、実際に運用してもらう計画としていたが、情勢悪化により無償事業は着工に至らなかったため、実運用は達成されていない。同無償事業は今後実施される予定であるが、現時点で着工のめどはたっていない。

# 付 属 資 料

- 1. 協議議事録 (M/M): 合意文、合同評価レポート
- 2. 質問票(和文、英文)

# MINUTES OF MEETING ON THE JOINT COORDINATION COMMITTEE FOR THE PROJECT FOR ENHANCEMENT OF OPERATION AND MANAGEMENT CAPACITY OF INLAND WATERWAY IN SOUTH SUDAN BETWEEN

# JAPAN INTERNATIONAL COOPERATION AGENCY AND AUTHORITIES CONCERNED OF THE REPUBLIC OF SOUTH SUDAN (TERMINAL EVALUATION)

The Japanese side of Terminal Evaluation Team (hereinafter referred to as "the Evaluation Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Yoshimoto KOYANAGI, stayed the Republic of South Sudan (hereinafter referred to as "South Sudan") from April 5 to 17, 2015, for the purpose of conducting a Terminal Evaluation of "The Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan (hereinafter referred to as "the Project").

During its stay in South Sudan, the Evaluation Team had a series of discussions and exchanged views with authorities concerned of the Government of South Sudan.

The result of the Terminal Evaluation was explained and discussed at the Joint Coordination Committee (hereinafter referred to as "JCC") Meeting.

As a result of the discussions, both sides agreed to the matters in the documents attached hereto.

Juba, April 14, 2015

小柳桂泉

Eng. Yoshimoto KOYANAGI

Leader

Joint Terminal Evaluation Team

Japan International Cooperation Agency

Capt. David Martin HASSAN

Undersecretary

Ministry of Transport, Roads and Bridges

Republic of South Sudan

Eng. Akira KOYAMA

Leader

JICA Project Team

Fell Eng. John BULLEN

The First Director General

Ministry of Physical Infrastructure

Central Equatoria State

Republic of South Sudan

Eng. Abdu SILYE

Director General of River Transport

Ministry of Transport, Roads and Bridges

Republic of South Sudan

#### ATTACHED DOCUMENT

#### 1. Wrap-up Presentation by the Project Team

The project team expressed their thanks for the cooperation of the South Sudanese side for the last four (4) years. The project team confirmed that the capacity of the Juba River Port Administration (hereinafter referred to as "JRPA") staff and other members has gradually been improved though the project is halfway to the original target. The project team also expressed their expectation that all the staff related to river ports will utilize the JRPA Operation Manual and the Materials for River Port Policy and Regulation for proper management and operation of river ports.

#### 2. Project Evaluation by the South Sudanese side

The South Sudanese side expressed their thanks to JICA and the project team for execution of the project for four (4) years and evaluated that the capacity of the staff has steadily been strengthened. However, the South Sudanese sides pointed out there are still issues and problems on management and operation of river ports, and therefore strongly requested to JICA to continue to extend cooperation in the field of river ports and inland waterway.

#### 3. Terminal Evaluation of the Project

The Terminal Evaluation of the Project was conducted by the Evaluation Team. The JCC accepted the Joint Terminal Evaluation Report attached as Annex-1.

#### 4. Condition of the Consideration of the Future Project

JICA and representatives of the government of South Sudan agreed the following items as conditions to discuss the framework (objectives, outputs, duration, etc.) of future project (hereinafter referred to as "Phase II") taking into considerations the surrounding situation in South Sudan such as security, society, etc,.

- 1) Conclusion of the contract agreement for construction works of the Grant Aid project "The Project for Improvement of Juba River Port"
- 2) Increase of cargo handling volume (Assume the number of barges recovers to the equivalent amount of 2011)

#### 5. Monitoring after the completion of the Project

JICA and representatives of the government of South Sudan agreed to monitor the following items after the completion of the Project, for the purpose of consideration of preparation of Phase II project. The monitoring will be done by JICA South Sudan office and will be reported to JICA HQs every three months. JICA might consider the dispatch of experts to assist the monitoring and to provide the necessary technical

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assistance in response to the technical capabilities of the South Sudanese side.

- 1) Progress of the authorization of the river port policy and regulation
- 2) Establishment of a tariff committee
- 3) Periodical measurement of water level
- 4) Periodical updating of the equipment ledger
- 5) Recording of barges accommodated
- 6) Periodical cleaning of port area as a routine work

**END** 

Annex-1: Joint Terminal Evaluation Review Report

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# Joint Terminal Evaluation Report on The Project for Enhancement of Operation and Management Capacity of Inland Waterways in South Sudan

Ministry of Transport, Roads and Bridges, the Republic of South Sudan

and

Japan International Cooperation Agency (JICA)

April 2015

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#### ABBREVIATIONS AND ACRONYMS

#### LIST OF ABBREVIATION AND ACRONYMS USED

BHN Basic Human Needs

C/P Counterpart

CES Central Equatoria State

CPA Comprehensive Peace Agreement
CPA Comprehensive Peace Agreement
DAC Development Assistance Committee

DG Director General

DRC Democratic Republic of the Congo DRT Directorate of River Transport

FFP Fire-fighting Plan FY Fiscal Year

GOS Government of Japan
GOSS Government of South Sudan

IMO International Maritime Organization

ISPS Code International Ship and Port Facility Security Code

JCC Joint Coordinating Committee

JICA Japan International Cooperation Agency

JRPA Juba River Port Administration
KEI Katahira and Engineers International

M/M Minutes of Meeting

MOPI Ministry of Physical Infrastructure

MOT Ministry of Transport

MT Metric Ton

MTRB Ministry of Transport, Roads and Bridges

NRTC Nile River Transport Corporation

OCDI Overseas Coastal Area Development Institute of Japan

ODA Official Development Assistance

OECD Organization for Economic Co-operation and Development

OJT On-the-Job Training
OSMP Oil Spill Management Plan
OVI Objectively Verifiable Indicator

PDM Project Design Matrix

PFSA Port Facility Security Assessment

PFSP Port Facility Security Plan

PO Plan of Operation

RSS Republic of South Sudan

TF Task Force

TR & B Transport, Road and Bridge
TSP Transport Sector Policy
WBS Work Breakdown Structure
WFP World Food Program
WG Working Group
WS Workshop

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#### 1. Introduction

# 1-1 Background of the Project (cited from PROGRESS REPORT, December 2013)

Through the Comprehensive Peace Agreement (hereinafter referred to as "CPA") in 2005 in the Republic of Sudan, GOSS was established and reconstruction in South Sudan is in progress. Based on CPA, referendum on the secession of South Sudan from the Republic of Sudan was carried out on January 9, 2011, with the result that South Sudan voted to recede from the north. On the 11th of July 2011, the Republic of South Sudan (hereinafter referred to as "RSS") was finally established.

In South Sudan, demands for commodities and materials necessary for daily lives and development of infrastructure are rapidly increasing, meaning that a stable and effective logistics system is required. Furthermore, smooth distribution of commodities and materials will bring good relations between the north and south Sudan, and will expedite CPA.

Therefore, inland water transport using the White Nile River in South Sudan which connects the city of Juba, the capital of the Government of South Sudan (hereinafter referred to as "GOSS"), to the port of Kosti, which is a base port of northern Sudan, is becoming extremely significant.

GOJ has extended ODA to Juba port for the development of a pier and handling equipment through an urgent development study as well as follow-up cooperation. Furthermore, through a grant aid cooperation named "the Juba river port expansion project" (hereinafter referred as "Grant Aid project"), a pier of 200m in length, large sized crane and warehouse, etc. will be developed. Cargo handling capacity is expected to be increased by introducing a full-scale mechanized handling system.

At the same time, the Ministry of Transport and Roads, GOSS (hereinafter referred to as "GOSS/MTR") and the Ministry of Physical Infrastructure, Central Equatoria State (hereinafter referred to as "MOPI/CES) jointly established the Juba River Port Administration (hereinafter referred to as "JRPA") for the purpose of management and operation of the port of Juba. Rudimentary technology transfer to staff of JRPA with regard to port management and operation was conducted by the project team in charge of the urgent development study and its follow-up cooperation.

Based on the above-mentioned background and the request of GOSS, JICA discussed the matter with GOSS/MTR, MOPI/CES, JRPA and related organizations, and agreed to implement the Project as a technical cooperation on October 2010.

Based on the said agreement, the main purpose of the Project is to enhance the operation and management capacity of staff of JRPA and other related organizations in order to properly maintain facilities and equipment which will be developed in the Juba river port expansion project, and to handle cargo effectively. In addition, knowledge and experience accumulated at the port of Juba will be shared among the major ports in South Sudan.

The 1st Phase of the Project commenced in March 2011 which ended in March 2012. As the 1st Phase of the Project, implementation system including TFs (Task Forces) was established and capacity building was conducted in various forms such as seminar or study tours. As the result, basic knowledge was acquired among the South Sudanese side.

During the 1st Phase Project, the South Sudan government reorganized ministries on August 2011. The Ministry of Transport and Roads, the counterpart ministry of the Project was divided into the Ministry of Transport and the Ministry of Roads and Bridges. The responsible organization (GOSS/MTR) of the Project has been the Ministry of Transport, RSS (hereinafter referred to as "MOT/RSS") The new ministry of transport has the minister, the deputy minister and the undersecretary, and then organizational strengthening of the ministry is realized together with the existing Directorate of River Transport. This reorganization of ministries is a welcome event for the Project.

In addition, institutional framework of central government in South Sudan was reformed in July 2013. The Ministry of Transport and the Ministry of Roads and Bridges which were separated in August 2011 after South Sudan gained independence have been merged once again to form the Ministry of Transport, Roads and Bridges in July 2013. However, this institutional reform does not affect the Directorate of River Transport which is the responsible organization for this project at this moment.

#### 1-2 Summary of the Project Design

The objective of the Project is to strengthen the management capacity of Juba port and such management system established at Juba port is to be shared among the ports in South Sudan. The Outputs are divided into seven (7) fields, such as 1) Establishment and execution of JRPA related to the roles and responsibilities, 2) Establishment of budget and accounting system of JRPA, 3) Management and maintenance of facilities of Juba port, 4) Efficient and safely cargo handling at Juba port, 5) Safe, secure and environmentally-friendly management and operation at Juba port, 6) Statistical data handling at Juba port, and 7) Knowledge and experience sharing from Juba port to the other primary ports in South Sudan.

The Project faced adverse effects due to deterioration in the security situation after the Juba Crisis in December 2013; therefore the Project had to be managed in a possible manner, such as the counterpart training in Japan and third countries. At the same instant, the Project was managed by remote control without site visit by Japanese experts. As the security situation seems to be stabilized, the site activities with the Japanese experts recommenced in March 2015 just before this Terminal Evaluation Study.

Here is an outline of basic information of the Project.

**Table 1.2 Project Outline** 

	ABMO ALL ANGION COMMITTO		
Riojagnama	The Project for Enhancement of Operation and Management Capacity of		
	Inland Waterway in South Sudan		
Relatedorganizations (1998)	Inland Waterway in South Sudan  Ministry of Transport, Roads and Bridges, Republic of South Sudan(MTRB/RSS),		
	Ministry of Physical Infrastructure, Central Equatoria State (MOPI/CES), Juba River Port Administration (JRPA)		
Administrative systems of the	Task Force one (1): Legislative aspect		
	Chief D/G of River Transport Ministry of TP & R		
	Task Force two (2): Budget and Accounting aspect		
	I 1° D/C Ministry of Physical Intrastructure. CES		
Mills of Dipos in the state of the state of	Task Force three (3): Cargo Handling and Operation aspect		
	Port manager of JRPA  Working Groups (WG) under Task Force three (3)  WG one (1): Port Operation and Procedures		
	Working Groups (WG) under Task Force three (3)		
ers in this contract, or distinguishing graves of	WG one (1): Port Operation and Procedures		
	WG one (1): For Operation and Procedures WG two (2): Cargo Handling		
the current of the section of the section of	WG three (3): Maintenance of Port Pacility and Equipment		
his orien details of heart application of a 14	WG four (4): Safety, Security and Environment		
	WG four (4): Safety, Security and Environment WS: Port Statistics		
Date of signing (R/D)	October 22nd, 2010		
Consentanterior and	From March, 2011 to February, 2015 (Extended until August, 2015 by the		
	Minutes of Meetings in February 3rd, 2014)		
Coore mion seliene	Technical Cooperation Project		
Relatedicooperation by	• July 2010: Juba Urban Transport Infrastructure and Capacity Development		
JICA	Study and its Follow-up cooperation (a pier of 35m in length and cargo		
	handling equipment)		
	•Grant Aid Assistance for the Juba river port expansion project (a pier of		
	200m in length, large sized crane and warehouse, etc. will be developed.		
constant of them is the state of	Cargo handling capacity is expected to be increased by introducing a		
	full-scale mechanized handling system)		
	and the Control of th		
	•1st Phase: from March 2011 to March 2012 •2nd Phase: from May 2012 to December 2013		
	•3rd Phase: from January 2014 to April 2015		
Other donors and related Cooperation	No special coordination with the other donors		
and the state of t			

#### (1) Target fields of the Technical transfer

The project aims to facilitate the inland water transport in South Sudan and enhance its capacity mainly in the following two (2) fields by MTRB/RSS, MOPI/CES and JRPA jointly with Japanese expert team activities at the Project site and counterpart trainings in Japan and third countries.

#### 1) Management Capacity of Juba port

The Project has been managing to enhance the management capacity of Juba port as a core organization to develop the whole management system of the other primary ports in South Sudan.

#### 2) Port Management System at the ports in South Sudan

Transferred technology and management system related to the river port at the hub port of South Sudan, Juba, is to be shared among the other ports.

#### (2) Project Design Matrix (PDM)

The Project Design Matrix (hereinafter referred to as "PDM") which was attached to the Record of Discussions (hereinafter referred to as "R/D") signed between JICA and GOSS on October 22nd, 2010, the revised PDM proposed at the Midterm Review in March 2012 and final revised PDM Discussed at 5th Joint Coordinating Committee (hereinafter referred to as "JCC") on November 21st, 2013, used for analysis on this evaluation study, indicates the current framework of the Project.

PDM for the terminal evaluation which was revised at 5th JCC is attached in "APPENDIX-01: Project Design Matrix (PDM)"

#### 2. Outline of the Evaluation

#### 2-1 Objectives of the Terminal Evaluation

The terminal evaluation of the Project was conducted with the following objectives.

- To confirm process on the implementation of the Project.
- To confirm the achievement of the Project and put forward effective recommendations for sustainability of the Project.
- To clarify in the logical framework how to achieve the Overall Goal, "Inland water transport in South Sudan is facilitated and its capacity enhanced."
- To confirm the current status of the issues.
- To review and discuss the scope, issues of succession project, currently requested by the Government of the Republic of South Sudan.

#### 2-2 Members of the Terminal Evaluation Team

The evaluation and the recommendations on the Project were made by the following members of the Japanese Evaluation Team (hereafter referred to as "the Team").

Table 2.2 Japanese Evaluation Team Members

Reige	र्वस्थायमण्डारे	TitleOsemization
Mr. Yoshimoto	Leader	Deputy Director, Team 2, Transportation and ICT Group
KOYANAGI		Infrastructure and Peacebuilding Department,
		Japan International Cooperation Agency (JICA)
Mr. Masaya OMAE	Evaluation Analysis	General Manager, Success Project Management Office Co.,
	<u></u>	Ltd.

#### 2-3 Schedule of the Terminal Evaluation

The Team conducted documentary reviews, interviews and site visits from April 05 to 17, 2015. Based on these activities, the Joint Coordinating Committee held a meeting on April 14, 2015. During the evaluation process, the Team members discussed issues relevant to the execution of the Project with the government authorities and institutions. The following table shows the detailed schedule.

Table 2.3 Evaluation Study Schedule

	Andrews 27 material State Control of the Control of							
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1	$\Delta pr(0)$	\$a.		Migheliom Aktile, legen				
2	(0)5	Şun		Mighew Liber South Sudan				
3	1016	New		Meeting with JICA Office,				
4	07	Tue		Internal Meeting with JICA Expert,				
5	08	Wed		Interview to the counterparts, Interview to other stakeholders,				
6	09	Thu		Project Site survey,				
7	10	Fri		Investigation for evaluation				
8	Į į į	Sas	Milliofion State, Appan	Antistic of collegic limits dila				
9	112	Sun		Disting Evelludion Report Disting MMM				
10	13	Mon	Meeting with Counterparts for M/M and the terminal evaluation report (C/Ps, expert team and evaluation team)					
11	14	Tue	JCC meeting and signing on M/M					
12	15	Wed	Meeting with expert team					
13	16	Thu	Wrap-up meeting					

	i jūzit		Legidas (Syritetidon Antilysis
14	17	Fri	Flight from Juba, South Sudan
15	18	\$a	Figur (6) Kenter, Jepan

#### 2-4 Methodology of the Terminal Evaluation

The entire evaluation was conducted based on the Project Cycle Management (hereinafter referred to as "PCM") method. The Team examined all the versions of PDM, process of project preparation and implementation, and achievement of the Outputs through analysis of related documents. Then the Team visited the Project site and had a series of interviews with the Japanese experts, counterparts and other relevant stakeholders. Subsequently, the Team confirmed the status of the Project's achievement in terms of Inputs, Activities, Outputs, Project Purpose and Overall Goal stated in PDM. The Team also evaluated the Project in the light of the five criteria by the Development Assistance Committee (hereinafter referred to as "DAC") of the Organization for Economic Co-operation and Development (hereinafter referred to as "OECD"): Relevance Efficiency, Effectiveness, Impact, and Sustainability. These criteria are defined as follows.

Table 2.4 Five criteria for evaluation

Divibritor edeale	Descriptions
	Relevance refers to the validity of the Project purpose and the overall goal in
kerevance	connection with the development policy of the recipient governments as well as the needs of beneficiaries.
	Effectiveness refers to the extent to which the expected benefits of the Project have
Difectiveness	been achieved as planned, and examines if the benefit was brought about as a result of the Project (not of external factors).
Dingercy	Efficiency refers to the productivity of the implementation process, examining if the input of the Project was efficiently converted into the Output.
	Impact refers to direct and indirect, positive and negative impacts caused by
Impros	implementing the Project, including the extent to which the overall goal has been attained.
	Sustainability refers to the extent to which the recipient country can further
Sustainability 1	develop the Project, and the benefits generated by the Project can be sustained
	under the recipient country's policies, technology, systems, and financial state.

The five criteria have been evaluated at five (5) different levels as shown in the Table 2.5 below.

**Table 2.5 Evaluation Levels** 

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Low	Rather Low	Moderate	Relatively High	High

#### Focal point on Evaluation

#### (1) Importance and relevance of the Project

In order to reaffirm the importance and relevance of the Project, the position of the Project in terms of the organization and system, budget allocation and future planning of both South Sudanese and Japanese sides were examined. Especially, the consistency with the development plan was confirmed.

#### (2) Project activities, progress, outputs and plan

The present issues were confirmed by analyzing the Project progress; especially unachievable subjects due to the unstable period of South Sudan from December 2013.

#### (3) Activities, organization structure, operating system, budget allocation of JRPA

The present situation of JRPA in terms of the activities, organization structure, operating system and budget allocation were confirmed so as to compare the situation at the mid-term review study of the Project in February 2013.

## (4) Cooperative framework in the Team

As a proper communication among the Project Team is very important, the present situation of cooperative framework was confirmed including the distribution of Japanese expert and counterpart personnel to the Project.

#### (5) View point from Program Approach

As the river transport field is very important not to be argued, JICA has been assisting to such field and will assist to improve physical distribution. The linkage of such activities for peacekeeping and poverty reduction was surveyed from the view point of program approach.

#### (6) Possibility of the future assistance to the river transport in South Sudan

As JICA has a realization of importance of the river transport in South Sudan, the terminal evaluation team examined the present needs by South Sudan side on the future assistance to such field. This examination was not to commit the future assistance but to collect information necessary to the future development generally.

## (7) Trend survey of the other donors

The information in terms of the cooperation with the other donors was collected in the field of river transport in South Sudan.

#### 2-5 List of Interviewees/Discussions

The interviews with the counterparts and stakeholders were conducted from 07 to 10 April and the summary of discussions are as follows:

Table 2-6 List of Interviewees and Discussions

(e)7/	April 1020 - HEROR DAVA (MicoriXenegeroffic	រុក្
	Name	Position
1	Mr. Emanuel Matayo Eli	Deputy Manager of Port, JRPA
2	Mr. Charles Juma Sysi	Cargo inspector

#### Discussions

- It was very huge contribution by IICA Project because the river port sector have some sort of management capacity recently which was nothing before the Project. Especially, a series of training and seminar for the knowledge and skill development of the counterpart personnel were remarkable; however it is necessary to keep on progressing to reach the level where the staff members who acquired such knowledge and skill may instruct others. If we imagine the full scale development of the port sector when peace returned to the country, we need to educate and train huge numbers of staff members.
- Unfortunately, the port of Juba only functions its role as a primary port in the river. Needless to add, it is not possible to manage water transportation by only single port. There are three (3) major shipping companies which have been working for the logistic service in the river; but their business is very much limited because of the situation. We should not wait without doing anything, but work for the time of peace, which means to train staff members, establish necessary system and develop enough facilities and equipment more and more. It is necessary to receive a support by JICA, especially in the practical training for the other personnel in the waiting list.
- As the main beneficiaries was JRPA related to the technical aspect, such counterparts will contribute to
  develop the capacity of the other ports because all ports are under the jurisdiction of the Directorate of
  River Transport, MTRB. It is expected the propagation effect to the other ports in the future when peace
  returned.

		- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
1	Mr. Jacob Daniel J.	Advisor, NILE BARGES (Shipping Company)
	Name	Residue
07/	ASSET THE REPORT OF THE PARCES	

#### Discussions

- Potentially, the demand of river transport is 60% of all nationwide cargo transport as recorded before
  the war because of the substantial geographical constraints especially huge area is covered underwater
  level in rainy season. The road transportation has heavy difficulty for a logistic services under such
  situation in 7 (seven) month a year. It is obvious the river transport is the lifeline of the country. It is
  also reasonable way of transport by river because it is cheap and capable for mass volume at once.
- NILE BARGES has four (4) barges and one (1) pusher which can carry four hundreds (400) metric tons
  (MT) multiple by four (4) barges pushed by a pusher, totally one thousand six hundreds (1,600) MT at a
  time. Such capacity has been contributing to the humanitarian support by the World Food Program
  (WFP). Both government of North and South have agreed to let the vessels which hoist the frag of WFP
  navigate safely on the river.
- Related to the safety of navigation, there are lots of collisions by the barge vessel and small motor boat
  on the river. It is necessary to revive the education and training system for crews of vessel which was
  organized before.
- There is a shipbuilder only for small boat but not for the necessary size to vessel, such as barge with four hundreds (400) to five hundreds (500) MT. It is necessary to establish such a shipbuilder in preparation to the time of peace.

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		Name	Posico
	1	Mr. Abdu Silye Mustafa Lako	Director General, Directorate of River Transport, Ministry of Ministry of Transport, Roads and Bridges

#### Discussions

- The output from the Project is said a big achievement from viewpoints of technical, managerial and awareness in the port sector in South Sudan. All stakeholders are very much satisfied with the Project even though there were some interference due to deterioration in the security situation.
- The Ministry of Transport, Roads and Bridges (MTRB) has been working on the River Transport Bill first and then the River Port Regulation. MTRB has collected information from India, Zambia and DRC for reference to put together with previous Sudanese regulation and drafted one by the Project. As it is the same in the other country, it takes time to work on a law and regulation. MTRB understands well its importance and immediacy; therefore such duties have been making by the experts on law.
- MTRB has been drafting the Transport Policy including the road and bridge. It is necessary to draw the
  master plan of transport after determination of the direction of such policy. MTRB should look for the
  assistance for making such a master plan from abroad because of lack of expert in the nation.

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lend film the little of the section	Ecsition
1 Mr. Bol Gordon Minyiel	Malakal Port Manager

#### Discussions

- Although the port of Malakal is important port but is does not have enough facilities and equipment.
   Only mobile crane is chartered to work for the heavy cargo and for the others by manpower. The port has been almost closed due to the present situation but the staff members have been working and trained in the port of Juba to get benefit from the Project.
- It is very much necessary to establish the training center for port staff in Juba to educate and train staff members for all ports effectively.
- The present location of ports are not proper because they are too near to the city center and lean space for the increased cargo volume at the time of peace.
- Other than subjects related to the port, there are critical subjects, such as license system for vessel and crew, especially inspection standard for the river vessels. There is no competent person for such an

inspection. These other important matters are also necessary to be covered by the River Transport Regulation.

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	Rame .			OS) (9(O)()		
1	Mr. Lino Schebesta D. Kenyi	Director Communic	General cation, MoP	for I, CES	Transport	and

#### Discussions

- The river transport is important in the country which has heavy and long rainy season without proper road and train infrastructure. And it is cheap and convenient for heavy and big amount of cargo. Although it is difficult to develop the river transport condition because of a various necessities, such as the facilities and equipment of port, dredging the river itself, navigational aids and so on. It is very wide coverage. Is has a high potential in the river transport but a heavy and wide range of duties to operate effectively. It is necessary to receive the assistance by the donors to complete such a difficult task.
- The importance of the river transportation in the Nile has been discussing base on the "Study Regarding
  the Possible Improvement of the Navigational conditions along the Nile". It is important but less
  development.
- Both the central and state governments understand the situation and have been working together to solve such difficulties. The Sudanese side appreciate very much for support to develop the port of Juba. It is expected to get supports for development of the other ports.

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	Keme	Rosliga
1	Mt. Zubeir Taban	Manager of Port, JRPA

#### Discussions

- The level of cooperation by JICA is very high for training personnel in cargo handling; however its duration may be a little bit short for technical excellence. At the same time, it was impossible to keep on working with the cargo handling equipment due to the delay of the grant aid project due to unforeseeable security situation in Juba. We are worried that such personnel who were trained may keep their skill now. It is very much appreciate that the well planned Project; however the deterioration of security of the nation disturbed the plan of Project.
- There are various subjects in the river transportation sector, such as management, operation, cargo handling, navigation, dredging, search and rescue and so on. The port sector in South Sudan is willing to invite the long-term experts in such subjects to work daily.

ji(0)	10April 11:00 = 1140 ac UCA Broger Meeting Room						
	NEWO:	laginor					
1	Mr. Charles Juma Seyis	JRPA					
2	Mr. Santo Chok Ngok	JRPA					
3	Mr. Joel Paulino Lado	JRPA					
4	Ms. Moda Nelson Baba	JRPA					
5	Mr. Ayuen Samuel Anyieth	JRPA					
6	Mr. Nyoma sawala laki	JRPA					
7	Mr. Iskandar Hassan	JRPA					
8	Mr. James Albino Juma	JRPA					

## Discussions (Working-level)

- All participants to the counterpart training in Japan, Kenya and in South Sudan were very appreciated
  the contents for technical matter but period of the training. It takes time to acquire proficiency in
  handling equipment, statistical processing and other practical subjects. If possible, it is required that the
  training in a long-term base for the person to be the key personnel for the own subject.
- There are some river ports which have the same target in Africa; therefore it is preferable to establish
  the network to share knowledge and skill in the region. It may take periodical workshop or discussion to
  improve together. For such group action, JICA can contribute to the regional society.

Young counterpart group does not forget the activities by JICA Project Team.

## 3. Project Performance and Implementation Process

#### 3-1 Input

#### (1) Input of Japanese Experts

The short term experts Twelve (12) Subjects as follows have been dispatched to the Project. Its detail is shown in the Appendix 03. The total M/M of these short term experts amounts 105.89 M/M including duties in Japan.

- 1) Team Leader/Port Policy
- 2) Assistant Leader/Port Administration (1)
- 3) Port Administration (2)/Public Relations
- 4) Port Management
- 5) Port Accounting System/Port Statistics
- 6) Port Operation (1)
- 7) Port Operation (2)
- 8) Port Safety Management (1)
- 9) Port Safety Management (2)/Port Security/Port Operation (3)
- 10) Facility Maintenance (Infrastructure)
- 11) Facility Maintenance (Equipment)
- 12) Project Administration/Port Management Assistant/Training Planning

## (2) Provision of equipment

Several equipment, such as Electric Distance Meter, Automatic Level, Lead Rope and Personal Computer, has been provided to the Project. Information in detail is shown in the Appendix 06.

Table 3.1.2 Provided Equipment (as of April 2015)

Jan Year Will	2011/12	2013	2014	2015/16.	Total
Sub Total in a Japanese Yen.	1,107,360				1,107,360
Sub Dotal in	4,120		50,950		55,070

Note: (1) Japanese fiscal year when the provision of equipment was made.

## (3) Local Operation Cost

The local operation cost was mainly utilized for purchasing training materials and office equipment. The Salary for local project staff, such as a secretary and security guards, was covered by the local operation cost as well. The local operation cost per phase is shown in the Table 3.1.3 Local Operation Cost.

Table 3.1.3 Local Operation Cost (as of April 2015 before the final dispatch of expert team)

(Unit in Japanese Yen)

	PHASE IN THE	Phase II was	Phase III	AND TOTAL PROPERTY.
Total amount executed		14,026,807	0	21,836,861
Mind the second		2,483,298	0	3,561,719
White the state of	6,731,633	11,543,509	0	18.275.142

#### (4) Counterpart training and study tour in Japan and third countries

A series of the counterpart training and study tour was made at port related organizations in Japan, at Bandari College in Mombasa, Kenya, at the Ministry of Public Works and Transport, Council of Cambodian Development and Mekong River Commission, in Cambodia and in Kosti, South Sudan as shown in the Table 3.1.4 below and the summary is shown in the Appendix 05.

<sup>(2)</sup> Equipment in 2014 was material for installation of the fence around port area which was not the equipment directory used for the Project activities.

Table 3.1.4 Counterpart Training (as of April 2015)

	#2010/11#	2012	2013	2014/15	Trofil .
al in Unipain Males and	3	3	0	6	12
Link envalue	4	4	4	7	19
In Cambodia	0	0	4	0	4
Ing Kostin Make	7	0	0	0	7
REPUBLICATION OF TOTAL	14	7	8	13	42

Note: Japanese fiscal year when counterparts training were made.

## (5) Inputs from South Sudan side

## 1) C/Ps

The personnel assignment of C/Ps are made from three (3) related organizations for three (3) Task Forces as shown below (as of April 2015) and its information in detail is shown in the Appendix 04.

Table 3.1.5 Counterpart Allocation (as of April 2015)

	Task korce is Output land 7) s	Park Force 2 (Output 2)	Task Force 3	Total
MIRB	3	0	1	4
MOBILE	2	2	0	4
URPAR	3	4	16	23
Total	8	6	17	31

NB: Parent Bodies of Counterpart at JRPA are MTRB (for 9 p) and MOPI (8 p) With an overlap between TFs

## 2) Building and facilities

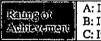
Office and meeting space for the Project implementation were provided properly.

## 3) Counterparts' Budget Allocation

The South Sudan side provided the necessary budget for the Project implementation.

## 3-2 Achievement of Outputs

**Table 3.2 Achievement of Outputs** 



- A: It will be satisfactory achieved by the end of the Project
- B: It will be almost but not fully achieved by the end of the Project C: It will be difficult to be achieved by the end of the Project

KriatiyeSummay .	in (กับได้เกิดเกา	Control of the Control Symmotor of Avolton and Control of the Cont
[Output 1] Roles and responsibilities of Juba River Port Administration (JRPA) are established and executed properly.	1-1 Regulatory framework of port administration in South Sudan is drafted.	Documentation activities have been progressing instructed by the experts through seminar, domestic and overseas trainings, WS and others as follows;  Port management policy in South Sudan (draft)  Main points of regulatory frame works (draft)  Basic regulatory framework regarding the port sector (draft)  Strengthening plan of JRPA (draft)  Roles and responsibilities of each department (draft)  Operation manuals at each department of JRPA
	1-2 Institutional operation manuals of Juba port are prepared.	<ul> <li>The Project Team has been working with the lawyers from the Ministry of Justice based on the drafted legal system. The operation manual at each department of JRPA which was drafted will be effective for institutional enhancement.</li> <li>As a PR activity, "Port Magazine" were issued twice.</li> </ul>
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#### [General Achievement of Output 1]

- Roles and responsibilities of JRPA were confirmed through a series of discussions, seminars and trainings which provided
  necessary documents to define such roles and responsibilities among those concerned. However it is necessary to
  concentrate on their executions even though JRPA has been waiting for 1) completion of the grant aid project and 2)
  recovery of river transport cargo volume. Such foresighted action should be very much effective to react for the future
  demand.
- The Ministry of Transport, Roads and Bridges (MTRB) has been working on the River Transport Bill first and then the River Port Regulations next. MTRB has collected information from various countries for reference to put together with previous Sudanese regulation and drafted one by the Project. As it is the same in the other country, it takes time to work on a law and regulation. MTRB understands well its importance and immediacy; therefore such duties have been making by the experts on law.

[Output 2.] [Output 2.] Budget and accounting system of JRPA are established.	2-1 A document for budgetary request is prepared and the budget is requested.	1 1	Summare/of/A After grasping the revenue/expen of facilities and equipment of JF working on the port accounting steam has been discussing on draf for existing facilities in order to commencement of the whole facilities and accounting system desi	diture balance and status of use UPA, the Project team has been system. As a result, the Project ting of tariff and rule of leasing respond to the necessity at the lities related to the full-swing of	
	2-2 Port tariff is drafted.	8 6 8 1	Although the outline of the budget and accounting system as a predministration body was already understood, it may take time establish such a system due to a difficulty related to the leg system. The points of understanding are 1) Necessity of the undependent accounting for the port administration body, 2) the tariff setting and collection method and 4) accounting egulation and tariff committee regulation.		
	2-3 Rules for leasing port facilities are drafted.	+ 5	The port tariff and leasing reg examples but still waiting for open	gulations were explained with ation.	
Termison Armsonist of Output	indictor 2±1 B		indita (1619)2) B	Wolfertor 2-8 B	

#### [General Achievement of Output 2]

- All the necessary matters have been discussed and summarized as the manual; however the actual procedure should be applied based on the actual new port facilities and equipment which will be provided under scheme of the grant aid project. Taking such an assumed procedure into consideration, the Project has been working for if-case and waiting for actual-case.
- As a trial for requesting budget to the Ministry of Finance, JRPA has submitted the budgetary request for the cost for smooth operation of the Project and the grant aid project and received its approval. Unfortunately, this budget was not executed due to the deterioration in the security situation.

		16.000 17.000 17.000 17.000 17.000	77*****************	
[Output 3] Facilities of Juba port	Indicators  3-1 Inspection manuals are prepared.	• The inspection m	Ishmortoy of Achtevem nanuals on maintenance facilities and equipment	nanagement of existing
are properly managed and maintained.	3-2 Facilities are inspected and maintained according to the manuals.	<ul> <li>JRPA staff learned how to conduct repair works by them through OJT.</li> <li>Through the exercise of a small concrete structure construct OJT, JRPA staff grasped the correct maintenance method.</li> <li>The inspection of maintenance and operation of the expandities and equipment has been instructing based on the manual through the manual.</li> </ul>		
	3-3 The ledger of port facilities is prepared.	The ledger was pr		
3-4 The depth of the berths at Juba port are periodically monitored and recorded.		soundness of the	nance management staff existing pier using surv and dumpy level and bathy	ey equipment, such as
Ratingol	मिर्वाकारकारका	indig toresign	ग्रित्वोष्ट्राक्षण्ड हे हे	indictorse)
Additavement of Output i	A	С	В	A

#### [General Achievement of Output 3]

- The inspection manuals on maintenance management for facilities and equipment and ledger of port facilities were prepared. It is necessary to apply to the new system when the grant aid project is completed; therefore the counterpart personnel should keep on brushing up each competency which were acquired by the Project in preparation to the coming chance.
- The inspection and maintenance method for the existing facilities and equipment was acquired by counterparts according to the manuals. Such skill and knowledge should be applied to the new facilities and equipment which are realized.
- The ledger is also provided for existing and assumed new facilities and equipment.
- Maintenance management staff members of JRPA understood the importance to measure and monitor the depth of water and acquired its skill how to use survey equipment for measuring the soundness of the pier. They are also instructed how to record periodically and stock as a database.
- Even though there is not enough cargo volume to a full-swing port operation, it is necessary to secure the inspection and maintenance duties, which were already acquired by them properly.
- The level of proficiency related to the existing facilities and equipment for inspection and maintenance is moderate; however it may be necessary to take some more technical instructions to reach such a proficiency level for the new ones.

	new over 12 may be about the first testimon institutions to reach shear a protectiony to ver for the new ones.					
New ative Summany [Output 4] Cargos are handled efficiently and safely at Juba port.	4-1 Cargo handling manuals for Juba port are prepared.	Summing to De Addition and the newly providing cargo handling equipment by grant aid project, such as crawler crane, fork-lifts, belt converted, basic subjects, important points of cargo handling duty efficiency were explained. The cargo handling manual for existing and new equipment was made.  The instruction related to the Crawler crane was completed by				
	4-2 Berth allocation system is developed.	<ul> <li>manual but necessary to have practical training after its provision.</li> <li>The berth allocation method for new facilities to be constructed was explained to the staff of JRPA and stakeholders, such as shipping company. Information in detail was provided in parallel with the schedule of the construction works in the grant aid project becomes clear. On the other hand, introduction of port procedures for entry and departure and berth allocation regarding present port activities is progressing.</li> </ul>				
	4-3 A rule for cargo handling services at Juba port is drafted.		handling is drafted at J Conditions on and Criter			
	4-4 Improvement Method of the efficiency for container handling is introduced.	<ul> <li>The audio visual material, such as the handling which was shot by the Project as an educational material for strict cargo handling.</li> </ul>		the handling site at port		
Refiteoff Assitacioned Output!	imle fortbi B	indenor42 B	गेलीकालस्ड B	<u>ùidleio.4</u> ∠! A		

#### [General Achievement of Output 4]

• Same as the Output 5, all materials necessary for the cargo handling and berth allocation system. OJT practice and manual explanation were also competed at a certain level for the existing environment of the port. However, it is too early to assess the competency enough for large flow of cargo. Correspondingly, also same as the Output 5, necessary arrangement of practical training for familiarization and professional use for the new facilities and equipment.

1					
Natative Summary	indicator and	Summerzoi/Aditezement			
[Output 5] Juba port is managed and operated safely, securely and	5-1 Rules regulating port service providers are drafted.	<ul> <li>The activities for the rules regulating port service providers were completed in line with discussions of new river port regulation.</li> <li>Such regulations are expected to be applied in line with the site situation, such as an improvement of legal systems and facilities.</li> </ul>			
environmentally- friendly.	5-2 Port security plan is prepared and trainings and exercises are implemented.	<ul> <li>The activities for the development of a security management, the preparatory works for new PFSP (Port Facility Security Plan) were done through the explanation of the conceptual idea and the technical terms. The subjects related to the PFSA (Port Facility Security Assessment) which will be necessary to prepare the PFSP was explained repeatedly. On-site exercise was conducted. PFSP for the new facilities as established at the 3<sup>rd</sup> phase and included in the manual.</li> <li>JRPA is planning to introduce the access control using ID card at an early date, like from May 2015.</li> </ul>			

	5-3 Fire fighting pl prepared and fire fi exercise is implem according to the pla	ighting ented	exercis of CES new fa phase.	e-fighting plan was e was done participe s and port related pe cilities was provided	ated from the fire-fire-fire-fire-fire-fire and included in the	ghting headquarters ghting plan for the e manual in the 3rd
	5-4 Crisis management plan including oil spill disaster is prepared.		• The preparatory works to develop a new OSMP (Oil Spill Management Plan) was conducted based on the OSMP which was developed under the 1st phase. The OSMP for the new facilities was provided and included in the manual in the 3rd phase. The on-site oil spill management exercise was conducted using the oil fence and oil absorbing mats.			
	5-5 An exercise aga oil spill disaster is implemented.	ainst	fire-fig	portant matters, such thing for small boa ess-building was n thing.	ts were instructed a	and as a result, an
	पीक्षण <u>ग्रेतीसक्टर्स ग्रेती</u>		10:52	indtends8	Jintile (pyS≮)	Indicio ින්
Ononi S	В		В	В	В	В

[General Achievement of Output 5]

• Again, it is the same situation of Outputs 3 and 4. All activities have been waiting for the new facilities and equipment for the actual full-swing operation. It is necessary to conduct verification for the actual operation of each matter based on the prepared manuals under the new environment of the port. And if there are any points for modification, some other assistance may be necessary to make it practicable.

	may be necessary to make it practication.					
* Starothe Summary	indiction and	Summersyof A	chievanen.			
[Output 6] Statistical data of Juba port are collected, maintained and utilized.	6-1 Manuals to collect port statistics and data are prepared.	<ul> <li>Although data collection has been interruption of the North-South Statistics" which was prepared we 3rd phase in preparation for the r future.</li> </ul>	distribution, "Manual of Port as introduced to JRPA during the			
	and utilized.	<ul> <li>An electronic statistical data form and a data collection method was a</li> <li>A database format was provided guided how to use and maintain.</li> </ul>	guided.			
	6-3 Brief port statistics report is prepared.	<ul> <li>"Brief port statistics report" was in</li> </ul>	nstructed at the 3 <sup>rd</sup> phase.			
(Relugio)	11701/4170786±1	Indianor62	Indignor6-8			
Addression of Output G	В	В	В			

[General Achievement of Output 6]

- Counterparts in charge of Output 6 have been working for how to collect and process data; however the size of data was very much limited due to an interruption of the North-South cargo flow. This Output 6 is not necessary to wait for the completion of the grant aid project but the recovery of cargo flow same as or more than one at peace.
- Manuals were prepared and instructed. The data processing format was also prepared by EXCEL software. Counterparts in
  charge have been practicing hardly on this system, even though there were not enough volume of data. Their incentive to
  learn and use this system should be highly appreciated.
- Necessary instruction for "Brief port statistics report" was made again using example which was completed once in the 2<sup>nd</sup> phase of the Project.

Namative Summary	and the state of t	Summersy of Architecement
[Output 7] Knowledge and experience accumulated at Juba port are shared among the ports in South Sudan.	7-1 The numbers of trainings and seminars provided for the staff from other ports.	<ul> <li>It is limited to grasp the current status of operation and administration of each port and to make technical instruction other than Juba port because of assignment lack of officers and restriction of visit for JICA experts due to security reason.</li> <li>The site survey and training were conducted twice and a WS was held to provide basic knowledge on port management and operation.</li> </ul>
	7-2 The numbers of staff attended trainings and seminars from other ports.	<ul> <li>"Training for regional port staff" was conducted in Juba. Four (4) regional port managers from the central government and three (3) staff from Upper Nile State were participated.</li> <li>The intensive lecture on the port management method was provided for the port managers from Malakal, Mangala, Shambey and Renk ports.</li> </ul>

<u>इंट (मिर्</u> टुर्छ)	in the state of th	ींग्रांच का निवास के किया है। इस्ति स्वास्त्र के						
Andrewspanicoi Organist	В	В						
[General Achievement								
and been facing risks de knowledge and experies	<ul> <li>Unfortunately, almost ports other than Juba have never functioned because of an interruption of the North-South distribution and been facing risks due to the deterioration in the security situation. Therefore, the activities related to Output 7 to share knowledge and experience to the other primary ports were made mainly at the port of Juba. Also, the expert team could not visit and act to such ports freely with the same reason.</li> </ul>							
liulalimentofriiolimpo	ezmeAssumptionslivithelevelloutheAstivities							
Counterpart staff are assigned at other six ports than Juba Port.	* It is difficult to share the know-how of Juba port with the other two (2) ports except Malakal, Mangala, Shambey and Renk because the necessary port staff members have not been allocated until the Project and							
Taulfillmencofflicike.co	INVIAIImentoriticales conditions							
Public security in South	The precondition was not fulfilled.							
Sudan is not	• The deterioration in the security situation sin	ce December 2013 has been exerting a serious						
deteriorated.	influence to the Project implementation.							

## 3-3 Achievement of the Project Purpose

Table 3.3 Achievement of the Project Purpose

table 3.5 Achievement of the Project Purpose				
Remarks Submitted	1100(ex(0)a)		Summary of Avoid exement	
Project Eurpose  1. Management capacity of Juba port is continuously strengthened.	Efficient operation of the new facility of Juba River Port is examined.	<ul> <li>Although the sii changed largely: JRPA have bee management ha procedure and oth have not been ac</li> </ul>	treation on the port management has not been since the Mid-term review, the staff members of in improving gradually the capacity of port ving an establishment of port management ters in general; however some of specific subjects thieved concretely due to the delay of grant aid restriction for the experts into South Sudan in the	
2. Port management system established at Juba port is continuously shared among the ports in South Sudan.	2. Capacities of staff at the ports in South Sudan are strengthened.	It is difficult to should be a compared to the necessary por Project end.     The intensive left.	hare the know-how of Juba port with the other two Malakal, Mangala, Shambey and Renk. because t staff members have not been allocated until the ecture on the port management method was port managers from Malakal, Mangala, Shambey	
Raingof	indicator		Lindler(o):2	
Azintezamanioi Listofiatikomota	В		В	
General Achievement of Project Purpose				

[General Achievement of Project Purpose]

- Management Capacity of Juba port: There are still exist some lack of matters in the port management system. Activities with the expert team at the last site visit provided "Juba River Port Administration Operation-Manual". This manual has contents as follows to cover all aspects which are assumed at this stage for existing and new environments. Counterparts are very much eager to use this manual for the port management from administrative to technical matters. This manual may cover a loss which was suffered during restricted period. The efficient operation of the new facility was examined based on the assumed specification of the new one and prepared the manual as real as possible.
- Sharing management system among the ports: It was limited to visit such primary ports by the expert team; therefore the alternative way was to invite the personnel in charge to Juba port. However almost ports other than Juba have never functioned because of an interruption of the North-South distribution and been facing risks due to the deterioration in the security situation as mentioned at the achievement of Output 7. And staff members were not allocated enough to such ports.

  \*\*Rultillment of the Important Assumptional in the United Excelling 18.

Staff members of counterpart are not transferred or resigned.	• Although there were some personnel transfers at the central and state governments; therefore it is difficult to say that the necessary matters related to TF1 and TF2, such as 1) Institutional and Legislative Aspects and 2) Port Management Aspects were shared with their successors properly. On the other hand, there were not significant personnel transfers at TF3.
The project of improvement of Juba River Port (Grant Aid Project) are implemented without serious delay.	• The delay of the grant aid project has interfered seriously due to unforeseeable security situation in Juba, especially to the activity schedule for TF2 and TF3; however there are some appearance of outputs as a result of the efforts by the experts and C/P who have been working with the existing facilities and equipment, and by the OJT as much as possible.

## 3-4 Prospects for Achievement of Overall Goal

Table 3.4 Prospects for Achievement of Overall Goal

Table 5.4 Prospects for Achievement of Overall Goal					
Newspire Summers	indicator	Sumi	neroy of Ashift-yearest		
Overall Coal Inland water transport in South Sudan is facilitated and its capacity enhanced.	1. Cargo handling capacities and performances at the ports in South Sudan are enhanced.	<ul> <li>It takes time to achieve the overall goal because of the low possibility develop river transport capacity. The present situation of river transport limited to the domestic duties, such as the assistance goods by UN or refug repatriation due to the deterioration of the North-South relations, and sm boat service only.</li> </ul>			
	2. The service levels of the ports in South Sudan are improved.	facilities and equipment capa	e grant aid project for Juba port to enhance the city and the same to the other target ports by institutional and human resource development		
Rampolitoriae		Indiatori	üntlertor2		
Ovariocon		С	C		
Appearance of	<ul> <li>No appearance</li> </ul>	exists because of the serious situa	tion.		
Overall Goal					
			Ardizeil Augione		
The budget for	• Although it is	expected to provide such budget	as much as possible, it is difficult to secure all		
developing river ports	expense which is very high cost projects, such as the facilities of port, dredging and so on.				
is secured.					
Port development	• The Government	nt of South Sudan has a realization	n to improve the port management capacity in		
policy does not	order to operat	e smooth cargo transport as the r	most important matter; therefore it is expected		
change drastically.	that the port de	velopment policy does not change	drastically in the future.		

## 3-5 Project Implementation Process

The Project has been implemented based on the R/D and PDM.

## (1) Revision of PDM

History of PDM revision is as follows;

1) The Objectively Verifiable Indicators were revised in the 1<sup>st</sup> JCC which was held in June 2012. Contents of the revision of PDM are as follows.

Table 3.5.1 Revision of PDM in June 2012

litem	(Adipti)	Realed	Breadi Climbe
(ઊર્જી-લાં <i>લ્લા</i> ડ)	Cargo throughput per hour	Cargo Throughput per month	Modified
Indicion for	Average queuing time of Vessels		Deleted
<b>©</b> माञ्चाल		Average berthing periods of vessels	Added
		The number of accidents, injured persons and damages of cargoes at Juba port	ļ

2) Due to the changes of the external conditions, PDM was revised based on the result of the midterm review in February 2012. This revision was approved in the 4th JCC which was held in February 2013. Contents of the revision of PDM are as follows.

Table 3.5.2 Revision of PDM in February 2013

item	Office	Revised	Tgjebof Gilarc
(Objectively Verticals	Operation manuals of Juba port are prepared.	<ul> <li>Institutional operation manuals of Juba port are prepared.</li> </ul>	Modified
hiderosio Onomi			

Objestictly Verticals Hallenssills Output 4	Cargo throughput per month Average berthing periods of vessels The numbers of accidents, injured persons and damages to cargo at Juba River port	Drafting cargo handling manual for new facility and application on actual harbor work at Juba Rive Port.     Development of berth allocation system and its application at Juba River Port     Drafting regulation on cargo handling activity     The number of containers handled per hour	Modified
iVenegi Voilgenorio Great	Interviews to the counterparts and port users	Draft of cargo handling manual Interview to the counterparts and users on berth allocation Draft of regulation of cargo handling activity The number of containers handled per hour	Modified
्रिकामुलाके ॥२१	To prepare operation     manuals at each manuals     department of JRPA	To prepare institutional <u>operation manuals</u> at each manuals department of JRPA	Modified
Activity It-8		promote public relations	Added
Autholy 4-3	To establish berth <u>adjustment</u> system at Juba     Port	To establish berth <u>allocation</u> system at Juba Port	Modified

3) Due to the changes of external condition again, revision of PDM was drafted and proposed based on the discussions in the 5<sup>th</sup> JCC which was held in November 2013. This revision is the final one of the series of revisions which were examined and analyzed mutually until the Terminal Evaluation in April 2015; therefore this PDM is used for the Terminal Evaluation Study. Contents of the revision of PDM are as follows.

Table 3.5.3 Revision of PDM in November 2013

mam	©algarei	Revisco	1MDG01
Landida a constituta de la constitución de la const	1 <b>8</b>	Marian and a facilities of the control of the contr	(Change)
(०)४में किस्मिक्वं ख	The new facility of Juba River Port is	Efficient operation of the new facility	Deleted and
मिधनरम्बद्ध	operated efficiently.	of Juba River Port is examined.	Added
	Capacities of staff at the ports in South	Capacities of staff at the ports in South	]_
Management of the second secon	Sudan are strengthened.	Sudan are strengthened.	
Mentof	Operation records of each division of	<u>Understanding of JRPA operation</u>	Deleted and
Westileation (6)	JRPA	<u>manuals</u>	Added
निर्वाहन निर्वाहरू	Interview to the counterparts and port	Interview to the counterparts and port	•
· ·	users	users	
48 (1997)	Evaluation of port management and	* Evaluation of port management and	
	operation by checklist	operation by checklist	
OM for Output i	Juba River Port is operated according		Deleted
	to the manuals.		
Kensoi	Port management and operation		Deleted
Weatherfood or	records		
(Quijati)	-		
10XXIII ON	The budget and accounting documents	A document for budgetary request is	Modified
	at Juba River Port are prepared.	prepared and the budget is requested.	
	Port tariff and leasing rules are		Deleted
6192	applied at Juba River Port.		
Kenso	Budget and accounting documents	Budgetary request document	Modified
Washerlander	Port management and operation		Deleted
Ougu 2	records		
OM tor Compute	The ledger of port facilities is prepared	The ledger of port facilities is	Modified
l Fra	and updated.	prepared,	
lX(e <sub>1</sub> m,σ)	The ledger and the inspection	The ledger of Port facilities	Modified
Wedthermonion	/maintenance records		
OMEN Cinging			
covacion configure:	Cargo handling manuals for Juba port	Cargo handling manuals for Juba port	Modified
	are prepared and they are applied on	are prepared.	
	actual harbor work at Juba port.	We do the second	36-46-4
	Berth allocation system is developed	<ul> <li>Berth allocation system is developed</li> </ul>	Modified
	and applied on Juba port.		
de taglia de la come	Number of containers handled per	Improvement Method of the	Modified
المتناط المتناط المتناط	hour is increased.	efficiency for container handling is	L

		introduced.	
Memori Memori Objanis	Management and operation records of Juba River Port		Deleted
/Aष्वक्रीक्षांकु/३५₽	To prepare and update a ledger for facilities at Juba port.	To prepare a ledger for facilities at Juba port.	Modified
l (Aviidiy (2)	<ul> <li>To handle cargoes at the new terminal of Juba River Port according to the manuals,</li> </ul>	To provide direction of cargo handling based on a manual for a new terminal.	Modified

Note: OVI stands for Objectively Verifiable Indicator

#### (2) Related to Activity 1

- The activities related to "River Port Policy" and "River Port Regulation" were completed. The draft of other operation manuals were also completed after comprehensive discussions at the training in Japan in the 3rd phase.
- Although it has a delay on preparation of the draft regulatory framework of port administration and the
  management and operation manual due to the experts dispatch restriction to the Project site, it has some
  degree of progress. The maintenance and operation manual for the port of Juba was provided both for
  the existing and new facilities and equipment, however such manual has been waiting for the actual
  application to the new actual facilities and equipment.

#### (3) Related to Activity 2

- The necessary case examples and legal system related to the budget and accounting system which are independent as the port management body were discussed. A budgetary request was made experimentally and approved; however it was not implemented because of the outbreak of civil war. The process up to planning and requesting has been progressing as scheduled.
- The establishment of budget and accounting system was not yet in sight to be approved as the independent body due to the legal system.

#### (4) Related to Activity 3

- The activities for preparation related to the existing and new facilities and equipment have been progressing as scheduled; however for the new ones is just based on the specifications. The inspection manual was prepared and a part of it was instructed in the 3<sup>rd</sup> phase. And the instruction related to a part of the new facilities was made during the third country training. The method of maintenance and operation for the new facilities was provided as a manual level.
- The ledger of facilities related to the existing facilities was made almost as scheduled but to the new facilities has been dealing with in the 3rd phase base on the manual for their full-scale operation.
- The activities on the depth measuring and recording are progressing as scheduled, such as installation of the automatic level to measure the depth and its direction for use. The instruction for water level monitoring was made until the end of the Project.

### (5) Related to Activity 4

• The expert team has been working on the cargo handling for a part of the new equipment with "Cargo Operation Manual" which were drafted during waiting period in Japan due to the deterioration in the security situation in South Sudan in order to catch up to the delay of the Project operation schedule and the third country training. At the final site activity in the 3<sup>rd</sup> phase, the mechanized manual was instructed.

## (6) Related to Activity 5

• The activities on the safety, security and environmental conservation have been made based on the existing facilities and equipment as scheduled. The subjects related to the new facilities and equipment was instructed utilizing various outputs at the final site activity.

## (7) Related to Activity 6

• It was taken from the basic management tools for statistical data, such as how to use PC and its application like "EXCEL" for the port statistics, and then will be instructing based on the statistics portion of "the JPRA Operation Manual" in the 3<sup>rd</sup> phase. The brief port statistics report has been prepared as schedules. The actual port data base will not be coordinated well because of fall-off of a

number of in-and-out bound barge ships; on the other hand, the method to manage such data was instructed based on the said manual.

## (8) Related to Activity 7

- It was not enough response to the activity 7 because of the following reasons;
- > Enough staffs were not assigned on each port,
- > Grant aid project was delayed due to unforeseeable security situation in Juba,
- > Expert team could not visit to the site as scheduled due to deterioration of security in the country
- The expert team has visited the port of Malakal three (3) times and organized the port management and operation training participated from all staffs of primary ports and staffs of the port of Malakal in July 2013.
- Even though the negative effect was critical due to a logistic stagnation and delay of the grant aid project due to unforeseeable security situation in Juba, there are a gradual progresses on awareness-rising, acquisition of necessary knowledge/skill both by the government staff and JRPA levels.
- This Project has been managed by short-term experts without allocation of a long-term expert, therefore such monitoring structure of activities at site should be made by C/P.

### 4. Evaluation by Five Evaluation Criteria

#### 4-1 Relevance

Relevance of the Project is evaluated "Relatively High" from the following perspectives.

#### Consistency with South Sudanese policies

The basic policy for the year from 2013 to 2017 in Transport Sector Plan, South Sudan (MTRB/RSS, April 2013) prioritizes the establishment of the effective distribution network, offering the safe transport service and strengthening the management capacity of MTRB. Furthermore, development of economic infrastructure such as transport is listed as a priority area to he highlighted in Joint evaluation mission report (2005 - 2011), which is Framework of north and south Sudan development and formulated by CPA (Comprehensive Peace Agreement). Therefore such policies correspond to the Project which has been targeting to 1) "Inland water transport in South Sudan is facilitated and its capacity enhanced." 2) "Management capacity of Juba port is continuously strengthened." and 3) "Port management system established at Juba port is continuously shared among the ports in South Sudan."

#### Consistency with Japan's aid policies

In June 2012, the Government of Japan adopted two prioritized development issues to South Sudan; 1) The development of infrastructure, 2) Enhancement of the governance, in a rolling plan. "Program for developing infrastructure" is one of Cooperation Programs to South Sudan based on the rolling plan. Through the Program, the Government of Japan intends to support the development of infrastructure which promotes a continuous economic growth in Juba and focus on activities to reduce regional differences for the consolidation of peace. (Commented by the Mid-term Review)

## Consistency with the other Japanese assistance

There is no case of the Yen Loan Project related to the Project, but the Urgent Development Study and its Follow-up Cooperation, the Grant Aid Project and the Group and Region-Focused Training have been assisting to provide an infrastructure, equipment and human resource development for the port sector respectively. The delay of implementation of the Grant Aid Project for providing facilities and equipment due to unforeseeable security situation in Juba is one of the serious factor of interference of the Project.

#### Relevance of the JICA Project to the South Sudan

Concerning the needs of the Ports in South Sudan, the handling cargo volumes were expected to increase in each port such as Juba port in South Sudan as the rapid development after the independence. In such situations, management capacity of ports needs to be strengthened and the need to implement the Project in ports is high. (Commented by the Mid-term Review)

The river transport is important for the relief supply of the UN and repatriated refugee more than the development of domestic industry for the time being. Although the traffic volume by barge vessels has been decreasing due to the logistic stagnation with Sudan, the transport by small boats has been contributing to carry food and daily commodity. When the relation with Sudan improves, it is expected to increase the traffic volume by river transport; therefore it is expected to contribute to the industrial development in addition to BHN.

Even though there are no data for comparison with the other mode of transportation, the North-South river transport is very important because it takes time to improve the road network which is very poor condition.

# Relevance of measures taken in the Project

## 1) Technical necessity on Japan's assistance (Japanese technology's superiority)

Container Volume of Japan is top seven (7) in the world according to the statistics of the Ministry of

Land, Infrastructure, Transport and Tourism (MLIT) in 2012. It means that the level of port management and operation is the highest level in the world.

There are various past records in the port sector for ODA by related consultant firms in Japan, such as the Overseas Coastal Area Development Institute of Japan (OCDI) as the leading firm among them, which has also an experience to work for the technical cooperation project including development of the river port of Mekong River in Phnom Penh, Cambodia.

#### 2) Properness of the selected Counterpart bodies

There are three (3) primary bodies to regulate and implement the inland water transport service, such as the Ministry of Transport, Republic of South Sudan (MTRB/RSS), the Ministry of Physical Infrastructure, Central Equatoria State (MOPI/CES) and Juba River Port Administration (JRPA). When such three (3) bodies function well with proper coordination, the Project Purpose will be achieved.

#### 3) Challenge to the critical issue

Potentially, the demand of river transport is 60% of all nationwide cargo transport as recorded before the war because of the substantial geographical constraints especially huge area is covered underwater level in rainy season. The road transportation has heavy difficult for a logistic services under such situation in 7 (seven) month a year. It is obvious the river transport is the lifeline of the country. It is also reasonable way of transport by river because it is cheap and capable for mass volume at once.

#### 4-2 Effectiveness

Effectiveness of the Project is evaluated "Rather Low" from the following perspectives.

#### Clearness of the Project Purpose and properness of indicators to measure the performance

Two Project Purposes 1) Management Capacity of Juba port is continuously strengthened and 2) Port management system established at Juba port is continuously shared among the ports in South Sudan are very clear purpose. Regarding the indicator for the Purpose 1), one of the most important conditions may say to develop the related policy, law and regulation. In order to strengthen the management capacity of Juba port may not be realized only by the human resource development.

#### Achievement of Project purpose

Although the situation on the port management has not been changed largely since the Mid-term review, the staff members of JRPA have been improving gradually the capacity of port management having an establishment of port management procedure and others in general; however some of specific subjects have not been achieved concretely due to the delay of grant project and entry restriction for the experts into South Sudan due to unforeseeable security situation in Juba in the 3<sup>rd</sup> phase of the Project.

## Contribution of Outputs for achieving Project Purpose

As mentioned in 3.5 Project Implementation Process, from (2) to (8) above, all the Outputs were directly contributed to achieve the Project Purpose.

## Factors inhibiting or promoting the achievement of Project purpose

Although there were some personnel transfers at the central and state governments; therefore it is difficult to say that the necessary matters related to TF1 and TF2, such as 1) Institutional and Legislative Aspects and 2) Port Management Aspects were not shared with their successors properly. On the other hand, there were not significant personnel transfers at TF3.

The delay of the grant aid project due to unforeseeable security situation in Juba has interfered seriously especially to the activity schedule for TF2 and TF3; however there are some appearance of outputs as a result of the efforts by the experts and C/P who have been working with the existing facilities and equipment, and by the OJT as much as possible.

#### 4-3 Efficiency

Efficiency of the Project is evaluated "Moderate" from the following perspectives.

Achievement of outputs

Output1: Roles and responsibilities of Juba River Port Administration (JRPA) are established and executed properly.

Output2: Budget and accounting system of JRPA are established.

Output3: Facilities of Juba port are properly managed and maintained.

Output4: Cargos are handled efficiently and safely at Juba port.

Output5: Juba port is managed and operated safely, securely and environmentally-friendly.

Output6: Statistical data of Juba port are collected, maintained and utilized.

Output7: Knowledge and experience accumulated at Juba port are shared among the ports in South Sudan,

## Quality, quantity and timing of inputs to achieve Outputs

Following findings are commented through the Experts and Counterparts.

## 1) Capacity of the Experts;

The quality of the Japanese experts were very high at the satisfaction level; however its quantity and input timing were not satisfied due to postponement of exerts dispatch after December 2013 because of deterioration in the security situation. It is necessary to catch up this delay as much as possible by technical guidance by the experts based on the manual which was prepared during their postponement period. Furthermore, it should be mentioned there was a lack of efficiency because the coordination with the grant aid project could not be made from a standpoint of input timing of the experts.

## 2) Provision of machinery and equipment;

Several equipment, such as Electric Distance Meter, Automatic Level, Lead Rope and Personal Computer, has been procured to the Project and utilized for activities of the Project.

And the material for the security fence around the port area was provided. The installation works has just started. Although this additional support which was not planned initially in the Project, JICA responded to the necessity to maintain a port security as the primary condition.

#### 3) Quality of counterpart training in Japan

The quality of the training in Japan which was well prepared on each subject was very much high which could not be experienced in South Sudan because of lack of facilities and equipment. Participants could build image of the coming facilities and equipment under the grant aid project,

It is necessary to take more time depending on the feature of subject. It might has a shortage to react the subject which C/P were interesting in, especially on the facilities. It is better to rearrange the itinerary and time allocation for training.

## 4) Allocation of the Counterpart Personnel by South Sudan side

It was difficult to allocate properly to each port other than the port of Juba due to the security purpose and slippage of cargo volume in line with the Project schedule. The staff members who have been working and having training at the port of Juba will be allocated to the other ports which start operation in the future.

#### Properness of budget scale to Project

## Input compared to similar project;

(Project on Establishment of National Port Policy and Administration System in Cambodia)

> Overall Goal: Port development and administration can be conducted according to National Port Policy.

- Project Purpose: Capacity of planning for National Port Policy and administrative management is developed.
- ➤ Long-term expert: 0 Short-term expert: 9 C/P training in Japan: 35
- 2) Consistency in relation between Inputs and the achievement level of Outputs;

Very low level of consistency due to the unsatisfied pre-condition.

3) Consistency in relation between Inputs and the achievement level of Project Purpose;

Very low level of consistency due to the unsatisfied pre-condition

4) Coordination with the other scheme of assistance or donor(s)

It was absolutely necessary to coordinate with the grant aid project which planned to provide the port facilities and equipment. It was scheduled to use the facilities and equipment which will be provided under this assistance from 2<sup>nd</sup> phase; however the Project should use the existing facilities and equipment because of the delay of the grant aid project due to unforeseeable security situation in Juba.

## Factors inhibiting or promoting the achievement of Outputs

Primary personnel of the Project from RSS, CES and JRPA were allocated into three (3) TF, such as 1) TF1: Institutional and Legislative Aspects, 2) TF2: Port Management Aspects and 3) Cargo Handling and Operation Aspects. Furthermore, TF3 were divided into four (4) Working Groups (WG), such as 1) WG1: Port Operation, 2) WG2: Cargo Handling and Safety, 3) WG3: Maintenance of Port Facility and Equipment and 4) WG4: Security and Port related Services and the statistics workshop (WS). Such special arrangement served to make each role clear and raise awareness among C/P members.

#### 4-4 Impact

Impact of the Project is evaluated "Moderate" from the following perspectives.

## Availability of possibility to achieve Overall Goal

It takes time to achieve the overall goal because of the low possibility to develop river transport capacity. The present situation of river transport is limited to the domestic duties, such as the assistance goods by UN or refugee repatriation due to the deterioration of the North-South relations, and small boat service only.

It is necessary to complete the grant aid project for Juba port to enhance the facilities and equipment capacity and the same to the other target ports by this Project. Furthermore, the institutional and human resource development is necessary.

#### Contribution of Project Purpose to Overall Goal

Both conditions such as Pre-condition and "Activation of economic activity towards the facilitation of river transport including domestic cargo distributions" are necessary to secure the logicality between the Overall Goal and Project Purpose. Although it is difficult to judge because the transport capacity and economic performance are both adjacent sides, it is expected that the transport capacity will make a contribution to accelerate the economic activity.

## Availability of effect to policy institution

The basic policy for the year from 2013 to 2017 in Transport Sector Plan, South Sudan (MTRB/ESS, April 2013) prioritizes the Establishment of the effective distribution network, offering the safe transport service and strengthening the management capacity of MTRB. Furthermore, development of economic infrastructure such as transport is listed as a priority area to be highlighted.

## Availability of the interference to achieve Overall Goal

Recovery of the river transport is closely related to the situation between North-South, there is no clear idea as an interference. It is impossible to achieve the overall goal only by the development of primary ports, like the port of Juba. It is obviously necessary to secure the pre-condition "Public security in South Sudan is not deteriorated."

## **Environmental Effect**

This Project is to assist in the field of port management; therefore there is no negative effect on the water pollution. On the other hand, the Project has been working on oil spill prevention which means the contribution to the environmental preservation. But, as it is issues in the field of vessel operation, the ballast water and oil discharges from vessels may not be unable to disregard when the volume of river transport is increased even though this is not the direct effect of this Project.

## **Unexpected Effects**

The most noticeable unexpected effect is the awakening of importance of the policy higher than the law and regulation. It was not discussed in the PDM related to the policy matter. The Project has found this fact during implementation of the Project and put how to develop into activities. It is not completed yet, but the Transport Policy and River Port Policy are considered as one of the most important matters to be solved by MTRB.

The next important finding as an unexpected effect is familiarization of the personal computer and its software necessary for statistics, accounting and other necessary subjects related to the port management. This fact was not discussed before the Project; however the Project team found the necessity and added in the program of the Project for the smooth implementation of the related activities. As a result, the counterparts who have been working for this under the guidance of the experts reached the level to instruct the other counterparts.

JRPA's motivation to sort out problems and issues has been raised through the Project and they started activities with their own initiatives. The management capacity of JRPA staff has been strengthened through OJT and other activities. It is expected that the Project maintains the motivation and incentive of JRPA staff.

## 4-5 Sustainability

Sustainability of the Project is evaluated "Moderate" from the following perspectives.

## Political, Organizational and institutional sustainability

The basic policy for the year from 2013 to 2017 in Transport Sector Plan, South Sudan (MTRB/ESS, April 2013) prioritizes the Establishment of the effective distribution network, offering the safe transport service and strengthening the management capacity of MTRB. Furthermore, development of economic infrastructure such as transport is listed as a priority area to be highlighted.

The Government of South Sudan has a realization to improve the port management capacity in order to operate smooth cargo transport as the most important matter.

#### Technical sustainability

The expert team provided the manual "Juba River Port Administration Operation-Manual" related to all the Outputs which were defined in the PDM with a purpose to satisfy a shortage of activities at site. This manual will contribute to let JRPA keep on working based on the Outputs.

(As reference: Contents of the Manual)

- 1. General Affairs and Administration Department
- 2. Budget and Accounting Department
- 3. Operation and Statistics Department
- 4. Risk Management and Environment Department

- 5. Mechanical Cargo Handling Department
- 6, Maintenance Department

It is expected that well understanding of the said manual "Juba River Port Administration Operation-Manual" by C/P and sharing to the successors to take root in the implementation organizations of the Project. However the level is to assume the coming facilities and equipment; therefore it may be possible to add some sort of technical assistance at the completion of the new facilities and equipment in the future.

## Manpower to maintain sustainability

There were some unstable factors surrounding the Project, such as 1) South Sudan has just been independent as the newest state in the world, 2) Outbreak of the civil war along the way of implementation of the Project, 3) Stagnation of river transport and 4) Delay of the grant aid project by JICA due to unforeseeable security situation in Juba; therefore it was difficult to expect the full-scale of ownership by C/P. However, it is highly appreciated their attitude to struggle against difficulties under such a situation.

And related to the fixation and continuity of the staff allocation, although there were some personnel transfers at the central and state governments, there were not significant personnel transfers in the practical level at TF3.

## Financial sustainability

As mentioned in the Impact above, South Sudan has stopped to export oil to Sudan and the revenue from the oil production has decreased. Moreover, it is difficult to secure all expense which is very high cost projects, such as the facilities of port, dredging and so on.

#### Necessary measures for monitoring the situation toward to secure sustainability

The following items are to be monitored to share with both side to secure sustainability.

- 1) Progress of the authorization of the river port policy and regulation
- 2) Establishment of a tariff committee
- 3) Periodical measurement of water level
- 4) Periodical updating of the equipment ledger
- 5) Recording of barges accommodated
- 6) Periodical cleaning of port area as a routine work

## 4-6 Conclusion of the Evaluation

Although the Project could not be implemented according to schedule because of various matters mentioned at each section of this report, both individual and organizational level in the field of port management were enhanced. But still further efforts are necessary to achieve the Project Purpose and Overall Goal.

MTRB has been working on the legal system formulation regarding the river transport to contribute to the port activities. MTRB has been drafting such documents together with the expert on law to accelerate for urgent completion. It is afford to say that the Project has contributed for this legal aspect in deep. It is expected to complete this very fundamental legal system for the inland water transport including the port management for the future economic development of South Sudan.

Both sides, South Sudanese and Japanese, should keep in touch to monitor the situation in order to spread the Outputs of the Project nationally to have a spillover effect widely.

Although the Project was heavily damaged by the deterioration in the security situation because of the delay of provision of facilities and equipment, the outsource occasions planned and instructed by the expert team, such as training outside of South Sudan, compiled manual for the necessary subjects were designed

as much as possible to cover the loss and delay. The counterpart group also did not fall into depression and then tried to make the most of an opportunity. Both side has tried to reach the goal together under such circumstances. Such a sincere manner on both side should be appreciated.

#### 5. Recommendation and Lessons Learned

#### 5-1 Recommendation

## (1) Short Term Recommendations to achieve the Project Purpose

- As the self-contained manuals were provided by the Project, the South Sudanese side is recommended to share the necessary items with the right personnel for further understanding and utilization both for the existing and new facilities and equipment. Continuity is the most important awareness to improve the human competence.
- 2) It is necessary to monitor the following items after the completion of the Project, for the purpose to show the continuous efforts by JRPA to JICA. The monitoring will be done by JICA South Sudan office and will be reported to JICA HQs every three months.
  - · Progress of the authorization of the river port policy and regulation
  - · Establishment of a tariff committee
  - · Periodical measurement of water level
  - · Periodical updating of the equipment ledger
  - · Recording of barges accommodated
  - · Periodical cleaning of port area as a routine work
- 3) In a similar way as the Short Term Recommendation 1) mentioned above, it is necessary to secure the continuity of technical development by means of some sort of technical assistance in the subject which does not need special facilities and equipment.

## (2) Long and Mid Term Recommendations to achieve the Overall Goal

1) There are various items to be fulfilled in order to develop the inland water transport, such as the port, vessel traffic lane, navigation rules and regulations, ship registration and inspection, ship's crew training and license, search and rescue system, pollution prevention, navigational aids, dredging etc. MTRB has been working for the River Transport Bill since long time; therefore such a legal system should cover all aspect related to the river transport in order to facilitate and enhance its capacity.

#### 5-2 Lessons Learned

## (1) Sense of fellowship

This Project has a real difficulty to implement because of the difficult story mentioned repeatedly above. It means that the Project members of both South Sudanese and Japanese sides had heavy burden to work towards the achievement of the Project Purpose. Under such situation, the expert team has been trying to reduce distance with the counterparts by means of OJT method hand in hand. This kind of attitude has create the sense of fellowship between them. Undoubtedly, the expert team and counterparts have a trusting relationship with each other. This kind of output is also very much important in the ODA activity.

## (2) Incentive and motivation

People works to enjoy life with desire to improve; however the situation in South Sudan has been deteriorated since the commencement of the Project. This is truly difficult story. Then, the expert team take the importance to keep incentive and motivation of counterparts into consideration for the planning of the Project, for example, training programs in the country and overseas, including in the third country, Kenya. Also OJT method was one of such ideas. Needless to say, the technical necessity should be first but some interesting factors may help to keep high incentive and motivation. This attitude has made various outputs from this Project climbing over the said difficulty.

#### Project Design Matrix

#### Project Title: The Project for Enhancement of Operation and Management Capacity of Inland Waterways in South Sudan (Technical Cooperation)

Term of Cooperation: Four and half years (2011~2015)

ravised date: 21 Nov, 2013

Version for Terminal Evaluation

Target Area: Juba and other six ports (Bor, Shambe, Adok, Malakal, Mangalla, Renk) in South Sudan

Direct beneficiary: Staff of Juba and other six parts. Indirect beneficiary: The citizens of Sudan

Counterpart: Responsible Agency, Implementing Agency: MOT/RSS, MOPI/CES, JRPA(Juba River Port Administration)

Scerelisse: Inland water transport in South Sudan is facilitated and its capacity enhanced.	-Cargo handling capacities and performances at the ports in South Sudan are enhanced. -The service levels of the ports in South Sudan are improved.	-Volume of cargo handled at each port in South Sudan. -Interviews to port users.		-The cargo volume handled in Juba port is about 5,000 ton/monthThe typical berthing period of vessets at Juba port is about 14 days.
Ricketing the capacity of Jubs port is continuously strengthened.  2.Port management system established at Juba port is continuously shared among the ports in South Sudan.	-Efficient operation of the new facility of Juba River Port is examined. -Cepacities of stell at the ports in South Sudan are strengthened.	-Understanding of JRPA operation manualsInterviews to the counterparts and port users.	-The budget for developing river ports is securedPort development policy does not change drastically.	- The new facility is to be constructedCapacity building of personnel in other ports than Juba has not been conducted so far.
O(Ippita  1. Roles and responsibilities of Juba River Port Administration(JRPA) are established and executed property.	Regulatory framework of port administration in South Sudan is draftedInstitutional operation manuals of Juba port are prepared.	-Draft of the regulatory documents. -Interviews to the counterparts and port users.	-Staff members of counterpart are not transferred or resigned. -The project of improvement of Juba River Port(Grant Aid Project) are implemented without serious delay.	- Regulatory framework of port administration in South Sudan does not exist thus needs to be drafted Institutional operation mannuals for the current facility in Juba port exist partially yet they are not utilized Operation mannuals for the new facility in Juba port need to be developed.
2. Budget and accounting system of JRPA are established.	-A document for budgetary request is prepared and the budget is requested. -Port terfif is drafted. -Rules for leasing port facilities are drafted.	<ul> <li>Budgetary request document.</li> <li>Draft of port tariff and teasing rules</li> <li>Interviews to the counterparts and users.</li> </ul>	1	- Budget and accounting documents of JRPA do not exist thus need to be developed Port tartif on the current facility exists partially yet it should be examined further Port tartif on the new facility needs to be drafted Format for application and record of leasing facility exist yet they are not utilized. Regarding new facility, format and rules for leasing need to be developed.
3. Facilities of Juba port are properly managed and maintained.	-Facilities are inspected and maintained according to the manualsThe ledger of port facilities is prepared.	-Interviews to the counterparts and port usersThe ledger of Port facilitiesThe berth depth records at Juba port.		Inspection and maintenance manuals do not existFormat for the lodger of the current facility exist yet it is not utilizedThere has been no record of monitoring of the depth of the berthsFor new facility, inspection and maintenance manuals and the ledger need to be developed.

4.Cargos are handled efficiently and safety at Juba port.	prepared.  -Berth allocation system is developed.  -A rule for cargo handling services at Juba port	-Cargo handing manuals -Interview to the counterparts and users on berth allocation -Draft of a rule of cargo handling services -Number of containers handling per hour		-Cargo handling manual do not exist thus need to be developedBerth allocation system is not introduced yetRegulation on cargo handling activity do not existNumber of container handling per hour should be counted when container handling will start30 min. per 20t container -2 hours per 40 ft container (Baseline (as of July 2013))
5.Juba port is managed and operated safety, securely and environmentally-triendly.	draftedPort security plan is prepared and trainings and excercises are implemented.	-Interviews to the counterparts and port usersManagement and operation records of Juba portReports of trainings and excercises.	,	Rules regulating port service provides of Juha port do not exist.  -Contact list for security exists yet security plan does not exist. Related exercise has not been adequately conducted.  -Contact list for fire fighting exists yet fire fighting plan does not exist. Related exercise has not been adequately conducted.  -Contact list for first management exists yet crisis management plan does not exist. Related exercise has not been adequately conducted.
<ol> <li>Statistical data of Juba port are collected, maintained and utilized.</li> </ol>	-Manuals to collect port statistics and data are preparedDatabase is developed and utilizedBrief port statistics report is prepared.	-Interviews to the counterparts, -Collected data in the database, -Port statistics report.		-Format for collection of statistics date exists yet it is not utilizedFormat for data inventory exists yet it is not utilizedDatabase needs to be developed and utilizedPort statistics report has not been prepared so far.
7.Knowledge and experience eccumulated at Juba port are shared among the ports in South Sudan.	-The numbers of trainings and seminars provided for the staff from other ports. -The numbers of staff attended trainings and seminars from other ports.	-Reports of trainings and seminars. -Interviews to the counterparts. -Questionnaires from attendants.		-Capacity building of personnel in other ports than Juba has not been conducted so far.

American				
Activities — 1-1. To review and analyse current situation of ports in South Sudan.  1-2. To clarify roles and responsibilities of each stakeholder (national and local governments, JRPA and shipping companies etc.).  1-3. To draft divisions of roles among the ports in South Sudan.  1-4. To draft divisions of roles among the ports in South Sudan.  1-5. To clarify the roles of each department of JRPA.  1-5. To clarify the roles of each department of JRPA.  1-6. To prepare institutional operation manuals at each department of JRPA.  1-7. To operate Jube port according to the manuals.  1-8. To promote public rolations  2-1. To review current port operation at Juba port.  2-2. To review and analyse financial status of JRPA.  2-3. To review current usage of facilities at Juba port.  2-4. To draft budget and accounting system including port tariff and leasing system of Juba port.  2-5. To prepare and implement budget plan of JRPA.  3-1. To review and analyze current maintenance and management conditions of facilities at Juba port.  3-2. To prepare a ledger for facilities at Juba port.  3-3. To prepare inspection manuals for port facilities.  3-4. To inspect and maintain facilities of Juba port according to the manuals and the ledger.  3-5. To monitor and record the depth of barths according to the manuals.  4-1. To review and analyze current cargo handling operation at Juba port.  4-2. To prepare cargo handling manuals for Juba port.  4-3. To organize technical trainings for cargo handling operation at Juba port.  4-5. To establish barth allocation system at Juba port.  4-5. To establish barth allocation system at Juba port.  5-6. To draft rules regulating port related service providers at Juba port.  5-7. To prepare a crists management plan against disasters at Juba port.  5-7. To prepare a crists management plan against disasters including off.  5-7. To prepare a crists management plan against disasters including off.	< Japanese side> (1) Dispatch of Experts; *Team Leader/Port Policy *Assistant Leader/Port Administration *Port Accounting System/Statistics *Port Operation(1) *Port Operation(2) *Port Safety Management(2)/Port Security *Facility Maintenance(Infrastructure) *Facility Maintenance(Equipment) *Project Administration/Port Management Assistant/Training Planning (2) Provision of machinery and equipment for the experts and training activities; *Vehicle *Office equipments *Training equipments and materials (3) Provision of training in South Sudan, Japan, and other countries to the counterparts. (4) Others if necessary upon mutual consultation and agreement.	2) Facility -Office space for the project 3) Arrangements for access to the necessary information, permission to project activities, and securing safety 4) Budget allocation -Allocation of counterpart budget -Operation and maintenance cost of provided equipments	-Counterpart staff are assigned at other six ports than Juba Port.  -Counterpart staff are assigned at other six ports than Juba Port.  -Public security in South Suden is not deteriorated.	
spill and implement an exercise at Juba port.  Activities: 6-1. To review existing statistical data at Juba port. 6-2. To design data collection formal and system for Juba port.			dineed in the translater	
8-3. To design detabase system and manuals for Juba port. 6-4. To organize technical training for data collection and analysis at Juba port.  7-1. To review and analyze current situation of port management and operation of other six ports.  7-2. To provide trainings and seminars for other six ports.		AP3		

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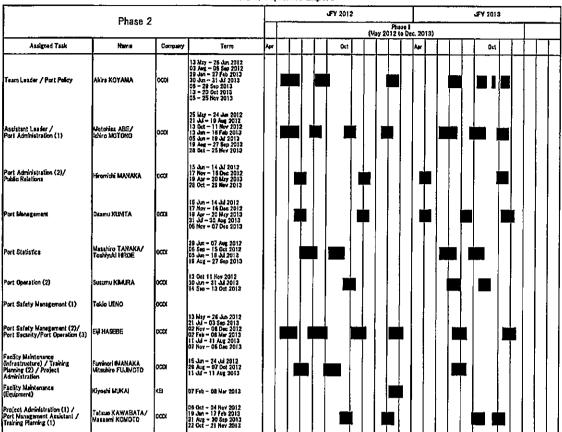
List of Japanese Expert

	Phase 1							JFY 201	i			
		Phase I (Mar.2010 to Apr.2012										
Assigned Task	Name	Company	Term	Apr				Oct				Apr
Team Leader / Port Policy	Akira KOYAMA	OCOI	26 Mar=10 May 2011 08 Aug =12 Sep 2011 31 Jan = 29 Feb 2012									
Assistant Leader / Port Administration (1)	Motohisa ABE/ Ichiro MOTONO	ocos	10 Apr - 24 May 2011 25 Aug - 18 Oct 2011 17 Jan - 20 Feb 2012				1					
Port Management	Masakazu OKUNO	осоі	10 Apr - 24 May 2011 15 Jul - 12 Sep 2011 08 Nov - 07 Dec 2013 31 Jan - 29 Fev 2012							1		
Port Accounting System / Port Statistics	Masahiko TANAKA	OCDI	25 Apr = 24 May 2011 16 Sep = 14 Nov 2011 17 Jan = 15 Feb 2012									
Port Operation (1)	Kensuke TSUJINO	OCDI	26 Mar - 10 May 2011 15 Jul - 12 Sep 2011 08 Nov - 07 Dec 2011 31 Jen - 29 Feb 2011									
Port Operation (2)	Masao (CHNOSE/ Susumu KIMURA	0001										
Port Safety Management (1)	Tokio UENO	ОСБІ	25 Apr 24 May 2011 25 Jul 22 Sep 2011									
Port Safety Management (2)/ Port Security/Port Operation (3)	EIJI HASEBE	OCEI	16 Sep = 14 Nov 2011 31 Jan = 29 Feb 2012									
Facility Maintenance (Infrastructure)	Furninori DIANAKA	0001	26 Mar = 09 May 2011 08 Nov = 07 Dec 2011									
Facility Maintenanca (Equipment)	Kiyoshi MUKAI	KĐ	26 Mar = 09 May 2011									
Project Administration / Port Management Assistant / Training Planning	Tatsuo KAWABATA	ocor	10 Apr - 09 May 2011 25 Jul - 23 Aug 2011 18 Oct - 16 Nov 2011									

NOTE: JFY means Japaness Fiscal Year (from April to March)
OCDE The Overseas Coastel Area Development Institute of Japan
KEL Katahira and Engineers International

AP-5

List of Japanese Expert



NOTE UP means Japaness Fiscal Year (from April to March)
OCOL The Oversess Coastel Ares Development Institute of Japan
KEt Katalika and Engineers International

## List of Japanese Expert

	Phase 3								JFY 201	4					JFY:	2015	
	rnase 3						(dar		to Apr. 20	15)							
Assigned Tack	Name	Company	Term		۸×			-	Oct				٨	*			
Team Leader / Port Policy	Akira KOYANA	ocol	26 Mar to 16 Apr. 2015														
Assistant Leader / Port Administration (1)	ichiro MOTONO/ Makata Mizutan	ocot															
Port Managément	Osamu KUNTA	OCCI												ŀ			
Port Statistics	Toshiyuki HIRQE	0001							İ					İ			İ
Port Operation (2)	Susumu KIMURA	осрі	05 -13 Sap 2014 04 -19 Oct 2014	İ							1	İΙ					1
Port Safety Management (2)/ Port Sacurity/Port Operation (3)	eij hasebe	0000	04 - 19 Oct 2014 26 Mar - 18 Apr 2015			l											
racety Mentenance (Infrastructure) Training Plandog (2)/	Mitsuhiro FUJIMOTO	cool	26 Mar 19 Apr 2015	ŀ		1	{				1			H		1	
Facility Maintenance (Equipment)	Kiyoshi MUKAI/ Tatsua KENAGA	KEI	26 Mar - 19 Apr 2015						-					il			
Project Admiristration (1)/ Port Managament Assistant / Fraining Planning (1)	Maszomi KOMOTO		05 -13 Sep 2014 26 Mar - 18 Apr 2015											i			

I racing (Harring (1))
NOTE: If y marked playments Flacial Year (from April to March)
OCCE The Diverseas Countal Area Development institute of Japan
KEE Katalrica and Engineers International

# List of Counterpart Allocation

Belong to	Position/Title (at the time of participation)	Name	Task Force	Task Force 2	Task Force 3	Remarks
MTRB	Director General/Directorate of River Transport	Maurice Rehan Deng				Apr Dec. 2011
	Director General/Directorate of River Transport	Abdu Silye Mustafa Lako	<b>⊚</b> Chịef			1st: Mar Apr. 2011 2nd: Jan. 2012 to present
	Deputy director/Directorate of River Transport	Red James P. Reat	©Chief of Phase 1			
	Researcher	Manyok Salmon	0		OWG3	Jan, 2012 to present
MOPI/CES	Central Equatoria State Ministry of insfastructure	Lewis Gore George				Retired in Apr. 2012
	*** Ditto ***	Emanuel Matayo Wani	li	@Chief		Apr. 2012 to present
	Director General Communication and Transport	Lino Schebesta D. Kenyi	0	0		
	Director Land Transport Department	Mercelino Raimondo Modi	0			From Phase #
JRPA	Port Manager	Zubeir Taban (ROSS)	0		<b>O</b> Chief	
OI/I.V	Deputy Manager of Port	Emanuel Matayo Eli (ROSS)	0	0	OWG1	
	Deputy Manager of Port	John Jambu (CES)	0	0	OMG3	
		Mogga Wani (CES)	1	_ i	OW@1	
		Ayuen Samuel (ROSS)		0	03204	
		Sant Chock (ROSS) Charls Juma Seys (ROSS)	]	_	OWG4	
		Moda Nelson (statistics)(ROSS)		0	OWG2, St OWG1, St	
		Chaplain Jansuk (statistics)(ROSS)	[		OSt OSt	
		James Alvino (CES)	{		OWG1	
		Emanuel Kamal (CES)	]	-	OWG2	,
		Joel Pdulino (mechanic)(ROSS)			OWG3	
		Willam Wruda (CES)			OWG2	
		James Wani (mechanic)(CES)	li		OWG3	
		Iscandal Hassan (electrician)(CES)	1		OWG3	
		Davit Wani (store keeper)(CES)		ļ	OWG4	
		Kamal Awado (electrician)(ROSS)			OMG3	

NOTE:

Task Force 1 is for Output 1 : Roles and responsibilities of Juba River Port Administration(JRPA) are established and executed properly.

and Output 7: Knowledge and experience accumulated at Juba port are shared among the ports in South Sudan.

Task Force 2 is for Output 2: Budget and accounting system of JRPA are established.

Task Force 3 is for Output 3: Facilities of Juba port are properly managed and maintained, and Output 4: Cargos are handled efficiently and safety at Juba port.

and Output 6 : Juba port is managed and operated safely, securely and environmentally-friendly.

and Output 6 : Statistical data of Juba port are collected, maintained and utilized.

WG1 : Port Operation

WG2 : Cargo Handling and Safety

WG3: Maintenance of port facility and equipment WG4: Security and port related services

St : Workshop for Statistics

# The List of Equipment Provided by Japanese Side

МО	Year	Name of Equipment	Qty	Price (Yen)	Price(\$)
1	2012	Electronic Distance Meter	1	1,000,000 Y	·····
2	2012	Automatic Level	1	80,000 Y	
3	2012	Lead Lope	1	27,360 Y	
4	2012	Personal Computer	1		900 :
5	2012	Personal Computer	1		900
6	2012	Lap top Personal Computer & Personal Computer	1 each		2,320
		Total for the Project Imple	ementation	1,107,360 Y	4,120 \$
1	2015	One (1) set of Fence			50,950
		1) Fence Post	209 pcs		· .
		2) Gement	4,300kg		· · ·
		3) Sand	8m²		
		4) Crused Ston	11m <sup>3</sup>		<del></del>
		5) Wire Net	496m		
		6) Connection Wire	456m		
		7) Annealing Wire	2,000m		
		8) Barbed Wire	2,000m		· · · · · · · · · · · · · · · · · · ·
		9) Plywaod Form	30m²		
		10) Gate	2 sets		
		11) Cement	1,500kg		· · · · ·
		12) Sand	3m <sup>3</sup>		
		13) Crushed Stone	4m <sup>3</sup>		
		t 4) Reinforced Deformed Bar	76 bars		
		15) Plywood Form	50m <sup>2</sup>		
		16) Remover for Concrete	36L		· · · · · · · · · · · · · · · · · · ·
		17) Corrosion Inhibitar	90L		
		18) Circular Saw Blade	8 pcs		
		19) Bender (Reinforcement processing device)	4 sets		
		20) Wire Cripper	6 sets		
		21) Concrete vibrator	2 sets		
		22) Annerling Wire Cut	25kg		
		23) Comon Rafter	350 pcs		
		24) Nail	2,000 pcs		<u> </u>
		Total for material of fence i	nstallation	Υ	50,950
	<del> </del>	Gra	und total	1,107,360 Y	55,070

List of Counterpart Training and Study Tour in Japan/Third Country

	LISE OF COURS	erpart Training a	na Stuay 10	ur	n	Ja	Þŧ	117/	1	ПТ	Q !	<i>U</i> 0	Ш	ш	y										_	
		JFY 2011						JFY 2012				Ι	JFY 2013				Τ	JFY 2014				1	JFY 2015			
						Para 11 ta	Ļ	.201	2	Phase 8 (May 2012 to Dec. 2012)						Phase II (Jun. 2014 34, 2015)					<b>,</b>					
Position/Title/Organization (at the time of participation)	Name	Contents	Terro	1		ŀ	1	I	F	I	"	·II	П	•		1	•	П	ŀ	I	т	10	П	Ť	ŀ	П
Deputy Manager of Port/MCPI/CES	John Jambu	at Bandari College		П		П	ſĨ	$\prod$	П	Π	П	T	$\prod$	Π		Γ	Π	П	Ī	$\ $	Ī	1		П	I	
Cargo Inspector/MOT/RSS	Charles Juna Sayle	Mombres, Kenya	24 Oct. 2011			l			Ш	1			H	11						H	Il	li	П	II		
Statistics/MOPI/RSS	Chaplain Janauk	Legislative system, port tariff, safety handing	11 Nov. 2011	Iİ		l	li	I	li		H	ll	H	li				ŀ	I	I	I	II	1	II	I	H
Port Manager of Malakal Port/MOPI/CES	Bol Gordon	cargo and port visit				Ì		II	Ш			ll	I	l	l					I	II	I	Ш	II	ll	
Director General/Directorate of River Transport/MOT/RSS	Maurice Rehan Dong	in Japan			П	Γ	Ī	I	П		П	ÌÌ	Ī	Ħ	Ī	T	П	П	Ħ	Ħ	ĬΤ	I	1	Ħ	İİ	1
Director for Port Development/Directorate of River	James Pal Reat	Legislative system of Ports, organizational	22 Nov. 2011				ľ	I	M		П	II	H		III		Ш		$\ $	۱			I	11	il	ij
Transport/MOT/RSS Director General/Directorate of Housing and Construction /MOPI/CES	Emmanuel Matayo Wani	management and accounting, devalopment	10 Dec. 2011																							
Ourgo inspector/MOT/RSS	Charles Jona Seyls			Ħ	Ħ	T	H	Ħ	Ш	Ħ	П	11	Ħ	Ħ	T	T	П	1	ij	H	lt	Ϊİ	Ħ	Ħ	Ħ	Ħ
Diver Meeter/MOT/RSS	Santo Chock Mgor			ļ			I	ll			H	li	l	lii	I		III		l	H	l	II	lÌ		$\parallel$	
inspector/MOPI/CES	Moda Melson	Kosti in Sudan			i		ľ	ll				li		lii	II		Ш		I			li	ll		ll	Н
Accountant/MOPI/CES	Chaplain Jansuk	Basic of port	27 Nov. 2011	II.	IJ		ı	il		II		#		Ш	I		Ш		I	l		li	I	H	il	H
Assistant Grane Operator in Maintenance Department/ MOPI/GES	James Ward Raphael	management, cargo handing management and port visit	03 Dec 2011			  -						ľ							I							
Electrician in Maintenance Department/MOPI/CES	lakandar Haktan Tombe			Ш			ŀ	lli				ll		W	$\parallel$	١,			il	]]		$\ $	ll			
Operation Department/ MOPI/CES	James Albino Juma						1						Ш		U				l		11	II	I		11	$\ $
Port Manager/MOT/RSS	Zubeir Teban Zakayo Kezango	st Bandari College,	12 Aug. 2012 to 07 Sep. 2012	I	I	П	II	$\llbracket$	$\prod$			$ lap{I}$	П		II	Π	$\prod$	T	I	T,	Π	II	$\prod$	П	$\ $	П
Accountant and Clerk/MOT/RSS	Ayuen Sammuel Anylath	Mombass, Kenys		Щ		П	Ì							1	II			H	li		I	I		Ш		l
Administrator/MOPI/CES	Michezel Mogga Ward	Legislative system, port teriff, safety handing		Ш	II		$\ $		l				Ш	IJ	II	:		H	II		I	][	Ш	Ш		II
Store Man/MOPI/CES	David Ward Sisto	cargo and port visit		III	li		$\ $			ı		1			П	Ľ		$\ $	II			[]				ll
Director General/Directorate of River Transport/MOT/RSS	Abdu Silya Mustafa Lako	in Japan	11 Nov. 2012 to 23 Nov. 2012	II	II		I	I	I	П		ſ	П			Г	$\prod$	I	l	T	T	II	П	П	П	П
Port Manager/MOT/RSS	Kazango	Legislative system of Porte, organizational		Ш	lĺ		$\ $		ľ	II			III		II		li	li	II		1	$\parallel$	Ш	Ш	ll	II
Director General for Transport and Communication, State Ministry of Infrastructure/MOPI/CES	l fen Schebacta Demba	management and accounting, development of ports and port/route visit																l	l							
Director General/Directorale of Tiver Transport/MOT/RSS	Abdu Siye Mustele Lako	Ministry of Public Works and Transport, Council of Cambodian Development	14 Oct. 2013 to 18 Oct. 2013																		Ī					
Directorate of River Transport MOT/RSS	Kok Manyok Secon Chol	and Mekong River Commission, Phoem Panh In Cambodia							Ì	Ì							1	Ħ					Ï			
Director General, Transport and Communication, Ministry of Physical Infrastructure, MOPI/CES	Ladu Samuel Tahan Laki	Conduct surveys on international river transportation rules, roles of central and releted local authorities		1						Ï		Ï						Ï	Ï	H		I	Ĭ	ľ	ľ	ij
		ig river ports, and other issues on port management and river transportation,																	ļ							
Director General for River	Abdu Siiye Mustafa			₩	╫	Н	╫	₩	╢	╫	+	H	Н	╫	╫	Ч	╫	╫	H	Н	ŀ	╫	₩	Н	₩	₩
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iead of Legal advisor to MTRB. Winistry of Justice	Diu Dhoc Gorduang			Ш	I	П	Ħ	Ш	TÌ	Ī	T		П	T	I	Г	I	Ħ	I	IT	l	Ħ	Π	Ĭ		Ħ
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Policy Research Officer, River Fransport, MTRB	Manyok Simon Chol	Legislative system and policy of port, inland water transportation	12 Aug. 2014 10 22 Aug. 2014	Ш	1	П	I	T	Ţ	Ħ		Ì	Î	Ħ	1	Γ	1	Ħ	T	ľ	r	$\dagger$	П	İĦ	T	Ħ
Director General, Directorate of Communication and Transport, Whistry of Physical Infrastructure, Contral Equatoria State		policy, port and soute visit	22 AUE 2014																							Ĭ
egal counselor, Ministry of Justice, Directorate of Legislation	Albino Nyiel Pelic			i			H	+					H	╫	Ħ	-	İ	#			-	╫	Ħ	r	H	╫
Bestrical Engineer Operation Department, JRPA	Kumai Awad Facialia (ROSS)			Ш		П	$\ $		IÌ				П	$\ $	I	П	$\ $	I		П		I	П	П	П	T
Crane & Generator Operator Maintenance Department, JRPA	Joel Paulino Ladu			Ш	T	П	T	$\ $	Tİ		T		П	T	Ħ	П	T	1	T	Щ	Ť	İ	T	ĮΤ	T	Ħ
	Santo Chock Ngor (ROSS)	at Bandari Gologo Mombasa, Kanya		Ш	Ħ	П	$\parallel$	$\ $	1		1		Ħ	#	Ħ	Π	$\dagger$	$\dagger$		III	$ \uparrow $	I	Ħ		Ħ	Ħ
Crarie Operator	Kama lEmmanuel Lalla	Safety handling careo	04 Oct. 2014 fo 19 Oct. 2014	Ш	$\ $	П	ΙŢ	Ħ	$\parallel$	Ħ	T	Ħ	Ш	$\parallel$	Ħ	П	1	$\dagger$	$\dagger$	Щ	T	Ħ	Ħ	Ħ	I	Ħ
Crans Operator	William Wurda Ladu	and port (construction site) visit and discussions	18 UCL 2014	Ш	#	П	Ħ	$\ $		Ħ	T	Ħ	Ш	Ħ	⇈	Ħ	T	#	$\dagger$	Ħ	$\dagger$	Ħ	Ħ	it	IT	Ħ
dechanical Engineer Vantenance Department, JRPA	James Wari Rephael (CES)			M	Ħ	H	ľ	$\ $	1	Ħ	1	Ħ	Ш	Ħ	$\dagger$	П	#	#	$\parallel$	Ħ	t	Ħ	H	İΗ	H	Ħ
	Iscandar Hassan Tombe	: I			++	↤	++	₩	++	-	-	+	ж	++	++	н	44	+	#	ш	ш	4	4	ιН	₩	H

Maistenance Department, JRPA (CES)
NOTE: JFY means Japanese Fatal Year (Irom April to March)
JRPA means Jubs River Port Administration

Appendix 07

Evaluation Grid for the Terminal Evaluation Study on "The Project for Enhancement of Operation and Management Capacity of Inland Waterways in South Sudan"

14, April 2015

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(Achievement)	Expectancy to achieve Overall Goal	Inland water transport in South Sudan is facilitated and its capacity enhanced.	-Cargo handling capacities     and performances at the     ports in South Sudan.     -The service levels of the     ports in South Sudan.	Volume of cargo     handled at each port     in South Sudan.     Port users, such as     private shipping     firms, and     turnanitarian support     agencies like WFP,     UNOCHA, KOM.	-Request in advance -Questions in advance -Interview	<ul> <li>It takes time to achieve the overall goal because of the low possibility to develop river transport capacity. The present situation of river transport is limited to the domestic duties, such as the assistance goods by UN or refugee repatriation due to the deterioration of the North-South relations, and small boat service only.</li> <li>It is necessary to complete the grant aid project for Juba port to enhance the facilities and equipment capacity and the same to the other target ports by this Project.</li> <li>Furthermore, the institutional and human resource development is necessary.</li> </ul>
	Expectancy to achieve Project Purpose	Management Capacity of Juba port is continuously strengthened.	•Efficiency of the operation of new facility of Juba River Port.	Operation records of each section of JRPA Operation records of each division of JRPA.  JRPA operation manuals  Counterparts and port users.	Request in advance - Questions in advance - Interview	<ul> <li>Although the situation on the port management has not been changed largely since the Mid-term review, the staff members of JRPA have been improving gradually the capacity of port management having an establishment of port management procedure and others in general; however some of specific subjects have not been achieved concretely due to the delay of grant project and entry restriction for the experts into South Sudan in the 3rd phase of the Project.</li> </ul>
		Port management system established at Juba port is continuously shared among the ports in South Sudan.	· Gapacity of staff at the ports in South Sudan.	•Counterparts, related person including the director of river ports and port users.	•Interview	<ul> <li>It is difficult to share the know-how of Juba port with the other three (2) ports except Malakal, Mangala, Shambey and Renk because the necessary port staff members have not been allocated until the Project end.</li> <li>The intensive lacture on the port management method was provided for the port managers from Malakal, Mangala, Shambey and Renk ports.</li> </ul>
	Expectancy or result of Output generation on	Roles and responsibilities of Juba River Port Administration	Draft regulatory framework     of port administration in     South Sudan.     Institutional operation	-Draft of the regulatory documents, -Port management and	Request in advance Questions in advance	Documentation activities have been progressing instructed by the experts through seminar, domestic and overseas trainings, WS and others as follows:     1) Port management policy in South Sudan (draft)     2) Main points of regulatory frame works (draft)

schadula	(JRPA) are established and executed properly.  Budget and accounting system of JRPA are established.	Readiness of budgetary request document and state of request, Readiness of budget and accounting documents at Juba port. Readiness of the draft of Port tariff.	operation records.  Counterparts and port users.  Budgetary request document-Budget and accounting documents.  Draft of port tariff and leasing rules interviews to the counterparts and port users.	-Request in advance - Questions in advance - Interview	3) Basic regulatory framework regarding the port sector (draft)  4) Strengthening plan of JRPA (draft)  5) Roles and responsibilities of each department (draft)  6) Operation manuals at each department of JRPA  • The Project Team has been working with the lawyers from the Ministry of Justice based on the drafted legal system. The operation manual at each department of JRPA which was drafted will be effective for institutional enhancement.  • As a PR activity, "Port Magazine" were issued twice.  • After grasping the revenue/expenditure balance and status of use of facilities and equipment of JRPA, the Project team has been working on the port accounting system. As a result, the Project team has been discussing on drafting of tariff and rule of leasing for existing facilities in order to respond to the necessity at the commencement of the whole facilities related to the full-swing of budget and accounting system design.  • Although the outline of the budget and accounting system as a port administration body was already understood, it may take time to establish such a system due to a difficulty related to the legal system. The points of understanding are 1) Necessity of the independent accounting for the port administration body, 2) the port income should be
	Facilities of Juba port are properly managed and maintained.	Readiness of the Inspection manuals, Inspection and maintenance situation based on the manuals.	Counterparts and port users. Ledger and inspection/maintenan ce records.	•Request in advance - Questions in advance - Interview	paid for port management and maintenance, 3) the tariff setting and collection method and 4) accounting regulation and tariff committee regulation.  • The port tariff and leasing regulations were explained with examples but still waiting for operation  • The inspection manual on maintenance management of existing and assumed new facilities and equipment was developed.  • The ledger was provided.  • Three (3) maintenance management staff of JRPA can check the soundness of the existing pier using survey equipment, such as laser theodolite and dumpy level and bathy
	,	Preparation and update situation of the ledger of port facilities. Periodical monitoring and recording situation of depth of berths at Juba port.	-Berth depth records at Juba port.		meter.  • JRPA staff leerned how to conduct repair works by themselves through OJT.  • Through the exercise of a small concrete structure constructed by OJT, JRPA staff grasped the correct maintenance method.  • The inspection of maintenance and operation of the existing facilities and equipment has been instructing based on the manual. The other factors for inspection should be acquired with the new facilities and equipment by the manual.
	Cargoes are	-Readiness of the cargo	·Cargo handling	•Request in	<ul> <li>Assuming the newly providing cargo handling equipment by the grant aid project, such</li> </ul>

	handled	handling manuals for Juba	manuals	advance	as crawler crane, fork-lifts, belt conveyors, etc., basic subjects, important points of
	efficiently and	port	·Interview to the	-Questions in	cargo handling duty and efficiency were explained. The cargo handling manual for the
	safely at Juba	·Development situation of the	counterparts and	advance	existing and new equipment was made,
	port.	berth allocation system on	users on berth	·Interview	• The audio visual material, such as the record of actual container handling which was
		Juba port	allocation		shot by the Project at the handling site at port as an educational material for strict
		•Readiness of the rule for	-Draft of a rule of		understanding on the safe cargo handling.
		cargo handling services at	cargo handling		• The tierth allocation method for new facilities to be constructed was explained to the
		Juba port	services		staff of JRPA and stakeholders, such as shipping company. Information in detail was
1		·Readiness of method of	·Time of containers		provided in parallel with the schedule of the construction works in the grant aid project
	•	efficient container handling.	handIng		becomes clear. On the other hand, introduction of port procedures for entry and
					departure and berth allocation regarding present port activities is progressing.
					•The instruction related to the Crawler crane was completed by the manual but
					necessary to have practical training after its provision.
	Juba port is	-Readiness of rules regulating	·Interviews to the	Request in	• The activities for the rules regulating port service providers were completed in line with
	managed and	port service providers.	counterparts and	advance	discussions of new river port regulation. Such regulations are expected to be apply in
	operated safely,	-Readiness of port security	port users.	·Questions in	line with the site situation, such as an improvement of legal systems and facilities.
	securely and	plan and state of	<ul> <li>Management and</li> </ul>	advance	•The activities for the development of a security management, the preparatory works
i l	environmentally-	implementation of trainings	operation records of	·Interview	for new PFSP (Port Facality Security Plan) were done through the explanation of the
	friendly.	and exercises,	Juba port,		conceptual idea and the technical terms. The subjects related to the PFSA (Port Facility
		-Readiness of fire fighting	Reports of trainings		Security Assessment) which will be necessary to prepare the PFSP was explained
		plan and state of	and exercises.		repeatedly. On-site exercise was conducted. PFSP for the new facilities as established
		implementation of fire			at the 3 <sup>rd</sup> phase and included in the manual.
		fighting exercise according to the plan.			* JRPA is planning to introduce the access control using ID card at an early date, like from May 2015.
		-Readiness of crisis			• The fire-fighting plan was made in the 1st phase and the on-site exercise was done
		management plan including			participated from the fire-fighting headquarters of CES and port related personnel. The
		oil spill disaster.			fire-fighting plan for the new facilities was provided and included in the manual in the 3 <sup>rd</sup>
		-State of implementation of			phase.
		exercise against oil spill			• The preparatory works to develop a new OSMP (Oil Spill Management Plan) was
		disaster.			conducted based on the OSMP which was developed under the 1st phase. The OSMP for
.					the new faceties was provided and included in the manual in the 3ed phase. The on-site
					oil spill management exercise was conducted using the oil fence and oil absorbing mats.
					• The important matters, such as an installation of the incinerator, fire-fighting for small
					boats were instructed and as a result, an awareness-building was made for the
				<u></u>	cleanness of port and fire-fighting.
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	Statistical data of Juba port are collected, maintained and utilized.	Readiness of manuals to collect port statistics and data. State of development and utilization of database Readiness of brief port statistics report.	Interviews to the counterpartsCollected data in the databasePort statistics report.	・インタビュー ・Request in advance ・Questions in advance -Interview	<ul> <li>An electronic statistical data format was prepared and introduced and a data collection method was guided.</li> <li>A database format was provided by the Excel applications and guided how to use and maintain.</li> <li>The purpose of port statistics and their important roles for port management and port operation were explained and understood by JRPA.</li> <li>Although data collection has been very much limited because of an interruption of the North-South distribution, "Manual of Port Statistics" which was prepared was introduced to JRPA during the 3<sup>rd</sup> phase in preparation for the recovery of river transport in the future.</li> <li>"Brief port statistics report" was instructed at the 3<sup>rd</sup> phase.</li> </ul>
	Knowledge are experience accumulated at Juba port are shared among the ports in South Sudan.	The numbers of trainings and seminars provided for the staff from other ports. The numbers of staff attended trainings and seminars from other ports.	-Reports of trainings and seminars, -Counterparts, -Quostionnaires from attendants,	Request in advance Questions in advance	<ul> <li>It is limited to grasp the current status of operation and administration of each port and to make technical instruction other than Juba port because of no assignment of officers and restriction of visit for JCA experts due to security reason.</li> <li>The site survey and training were conducted twice and a WS was held to provide basic knowledge on port management and operation.</li> <li>"Training for regional port staff" was conducted in Juba. Four (4) regional port managers from the central government and three (3) staff from Upper Nile State were participated.</li> <li>The intensive lecture on the port management mothod was provided for the port</li> </ul>
Properness of quality, quantity and timing of Input	(Japanese Input) Quality, Quantity and Timing of long/short term experts	Input data Comment C/P Comment by Japanese experts	•Achievement table provided by the Project •C/P, Japanese experts, other stakeholders	-Dacument review •Interview	Malakal, Mangala, Shambey and Renk ports.      JICA experts input     Twelve (12) experts from JICA were dispatched 105.89 M/M in total including duties in Japan.      C/P comments     The quality of the Japanese experts were very high at the satisfaction level; however its quantity and input timing were not satisfied due to postponement of exerts dispatch after December 2013 bocause of deterioration of in the security situation. It is necessary to catch up this delay as much as possible by technical guidance by the experts based on the manual which was prepared during their postponement period. Furthermore, it should be mentioned there was a lack of efficiency from a standpoint of input timing of the experts because the coordination with the grant aid project could not

(Japanese Input) Quality, Quantity and Timing of equipment	-Input data -Comment G/P -Comment by Japanese experts	· Achievement table provided by the Project · C/P, Japanese experts, other stakeholders	·Document review ·Interview	be made.  • JICA expert comments  It is not satisfactory made on the technical transfer related to the grant aid project because of the delay of it. It is effective to restart in the full-scale at the timing of completion of the grant aid project and recovery of the river transport in site.  Furthermore, an enough budget allocation to JRPA and a proper development of the working condition for G/P and experts will lead an effective technical transfer so as to secure the sustainability after the end of the Project.  • Several equipment, such as Electric Distance Meter, Automatic Level, Lead Rope and Personal Computer, has been procured to the Project and utilized for activities of the Project. Total amount is 1,107,360 Japanese Yen and 4,120 USD.  • The material for the security fence around the port area amounting 50,950 USD was provided. The installation works has just started.
(Japanese Input) Quality, Quantity and Timing of C/P training in Japan and third countries	-input data -Comment C/P -Comment by Japanese experts	- Achievement table provided by the Project - C/P. Japanese experts, other stakeholders	Document review Interview	The Project conducted C/P training at OCOI in Japan, at Banderi College in Kenya, at the port related organizations in Cambodia and at Kosti in South Sudan as shown below

. (Japanes	e input)   •Input data	·Achievement table	·Document review	port management and river transportation for executive personnel  • C/P comments  The quality of the training in Japan which was well prepared on each subject was very much high which could not be experienced in South Sudan because of lack of facilities and equipment. Participants could build image of the coming facilities and equipment under the grant aid project.  • JICA expert comments  It is necessary to take more time depending on the feature of subject. It might has a shortage to react the subject which C/P were interesting in, especially on the facilities. It is better to rearrange the itinerary and time allocation for training.  • The Mid-term Review Team was dispatched at the mid-term of the Project term in
Quality, C and Timir Study Te	uantity -Comment C/P g of -Comment by Japanese	provided by the Project •C/P, Jepanese experts, other stakeholders	•Interview	February 2012 as the normal JCA procedure for the technical cooperation project. As a result, the Review Team has grasped the situation of the Project and stated that (1) the Project has been working as scheduled using the existing facilities even though the grant project was delayed; (2) the Project should continue working with the existing facilities in order to response to the coming facilities under the grant project in the future.
(South St Input) Quality, G and Timir G/P alloc	-Comment C/P -Comment by Japanese g of experts	·Achievement table provided by the Project ·C/P, Japanese experts, other stakeholders	- Document review - Interview	South Sudanese Input The allocation of counterpart personnel by the South Sudanese side was as follows.  Even though there were some personnel changes at MOT and MOPI, the staff members at JRPA have been fixed and perticipating to the Project activities in a positive manner.

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						the time when the proper effects from the activities have come within sight, such as a
						good understanding with personnel whose English ability was not enough.
		(South Sudanese	·input data	-Achievement table	-Document review	The working environment for C/P were not fully provided up to the point of very basic
		input)	-Comment C/P	provided by the	-Interview	thing, such as desks and chairs.
		Quality, Quantity	·Comment by Japanese	Project		+As the guard fence was provided around the office, the security condition was
	•	and Timing of	experts	•C/P, Japanese	1	improved,
		land, building and		experts, other		• Even though it may be difficult to provide, it is difficult to say that the power supply and
		ancillary facility		stakeholders		IT environment was enough.
		(South Sudanese	∙Input data	·Achievement table	-Document review	•It is hard to say enough budget allocation but maximum efforts by South Sudan side,
		Input)	·Comment C/P	provided by the	-Interview	However, it is necessary to provide a basic working condition, such as electric power
		Quality, Quantity	·Comment by Japanese	Project		supply, desk and chair, office supplies, business equipment, etc.
		and Timing of	experts	-C/P. Japanese		• The Team has made the budgetary request practice by OJT and received the budget
		local cost		experts, other		allocation but could not executed due to the civil war.
				stakeholders		
(88)	Situation of	Availability of	·Progress of Activity	-Achievement table	-Document review	(Activity 1)
(Implementation Process)	Activity	issues for		provided by the	•Interview	• "River Port Policy" and "River Port Regulation" were completed. The draft of other
<u> </u>	implementation	activity progress.		Project		operation manuals were also completed after comprehensive discussions at the training
tatic	on schedule	If any, issue,		·C/P, Japanese		in Japan in the 3 <sup>rd</sup> phase.
	ļ	cause and		experts, other		
		solution		stakeholders		(Activity 2)
ક						• The necessary case examples and regal system related to the budget and accounting
						system which are independent as the port management body were discussed. A
						budgetary request was made experimentally and approved; however it was not
						implemented because of the outbreek of civil war. The process up to planning and
						requesting has been progressing as scheduled.
						• The establishment of budget and accounting system was not yet in sight to be
		į				approved as the independent body due to the regal system.
				!		(Activity 3)
İ						• The activities for preparation related to the existing and new facilities and equipment
						have been progressing as scheduled; however for the new ones is just based on the
						specifications. The inspection manual was prepared and a part of it was instructed in the
						3rd phase. And the instruction related to a part of the new facilities was made during the
	I			1	1	third country training. The method of maintenance and operation for the new facilities

> Expert team could not visit to the site as scheduled due to deterioration of security

Existence of negative	Availability of Project	·Process and frequency of project manitoring	-Achievement table provided by the	•Document review •Interview	in the country  *The expert team has visited the port of Malakal three (3) times and organized the port management and operation training participated from all staffs of primary ports and staffs of the port of Malakal in July 2013.  *Even though the negative effect was critical due to a logistic stagnation and delay of the grant aid project, there are a gradual progresses on awareness-rising, acquisition necessary knowledge/skill both by the government staff and JRPA levels.  *This Project has been managed by short-term experts without allocation of a long-te expert, therefore such monitoring structure of activities at site should be made by C/
aspect on Project Management Structure	monitoring structure		Project •C/P, Japanese experts, other stakeholders		
	Smoothness of communication in Project	Process and content of meeting and discussion	Record of meetings Report of the Project C/P, Japanese experts, other stakeholders	-Document review -Interview	There was no communication gap while the experts stayed at site even though a little language gap in English; however there was almost impossible for a remote communication by internet during the expert team was in Japan.
	Smoothness of communication and cooperation with JICA HDQs and local office	Process of communication and cooperation	Report of the Project -C/P, Japanese experts, other stakeholders	·Document review ·Interview	•No difficulty on communication with the HDQs and local office of JICA.
	Smoothness of communication and cooperation with the authorities in South Sudan, such as MOT, JRPA, etc.	Process of communication and cooperation	Report of the Project C/P, Japanese experts, other stakeholders	-Document review -Interview	<ul> <li>The communication and cooperation among the related authorities and experts team because JRPA has been working with experts on a daily basis, and the central/state government personnel participated to the seminar, JCC and other chances. On the oth hand, the Project team challenged to divide C/P from respective bodies into three (3) Task Forces (TF) in order to define each duty and responsibility targeting an affectiv cooperation system.</li> </ul>
Height of ownership to Project by	Has South Sudan side been working on the	-Chronological budget tendency of C/P organization	Budget document of C/P organization Report of the Project	-Document review -Interview	• There were some unstable factors surrounding the Project, such as 1) South Sudan h just independent as the newest state in the world, 2) Outbreak of the civil war along the way of implementation of the Project, 3) Stagnation of river transport and 4) Del

implementation agency or	Project activities with a high	State of implementation State of communication and	•C/P, Japanese experts, other		of the grant aid project by JICA; therefore it was difficult to expect the full-scale of ownership by C/P. However, it is highly appreciated their attitude to struggle against
C/P	ownership?	cooperation	stakeholders		difficulties under such a situation.
		·Awareness of C/P			*It is also appreciated on the effort to provide the budget to the Project even though it
					was not enough from the aspect of a perfectness.
Height of	Has stakeholders,	·Awareness of stakeholders	·Budget document of	·Document review	*Primary personnel of the Project from RSS, CES and JRPA were allocated into three (
motivation to	such as MOT,	to the Project Purpose	C/P organization	•Interview	TF, such as 1) TF1: Institutional and Legislative Aspects, 2) TF2: Port Management
participate	JRPA, etc.,		-Report of the Project		Aspects and 3) Cargo Handling and Operation Aspects. Furthermore, TF3 were divided
and	understood and		·C/P, Japanese		into four (4) Working Groups (WG), such as 1) WG1: Port Operation, 2) WG2: Cargo
consciousness	been supportive		experts, other	Ì	Handling and Safety, 3) WG3: Maintenance of Port Facility and Equipment and 4) WG4:
to Project by	to the Project		stakeholders		Security and Port related Services and the statistics workshop (WS). Such special
stakeholders	activities?				arrangement served to make each role clear and raise awareness among C/P member
Existence of	What are the	-Project activity record	·Project progress	·Document review	(Inhibitory Factor)
issues during	inhibitory and/or		Report	·Interview	. Concerning to Planning: Due to the implementation delays of Japanese grant aid, the
implementation	acceleration		<ul> <li>Project Annual Report</li> </ul>		Project has difficulties in transferring the techniques so that JRPA staff can utilize th
process or	factors?		•C/P, Japanese		new facilities. Under the circumstances, the Project is conducting training in the existing
cause to	What was the		experts, other		facilities in order for JRPS to correspond the new facilities.
produce	measures to		stakeholders		*Concerning to implementation Process: Due to the outbreak of civil conflict in December
effect	solve the				2013, it was broken up the JICA experts dispatch to the site. During this period, the
	disincentive			ł	expert team has prepared the necessary manuals as much as possible to let the limite
1	factor(s)?				site activities for technical transfer in the 3 <sup>rd</sup> phase effective.
					(Acceleration Factor)
					+Concerning to Planning: Although it was not planned initially, the practical trainings by
					OJT were planned and implemented to a maximum extent because the delay of the gra
			•		aid project was anticipated. This measure has made the lack of technical transfer
•					minimum due to the said delay.
1					• Concerning to Implementation Process: Meetings have been periodically held to share t
İ					knowledge and information between Japanese experts and C/P and to decide the
		j			important issues of the project. Japanese experts have the confidence that the
					communication with C/P has been improved, end have the opinion that further
Duanamana of	F&L	Ph. L F	Project Provide		understanding and collaboration should be promoted.
Properness of	Effectiveness	State of communication and	Project Report	Document review	Urgent Development Study and Follow-up cooperation: "Juba Urban Transport
cooperation or coordination	and efficiency on	Gooperation	·C/P, Japanese	•Interview	Infrastructure and Capacity Development Study in the Southern Sudart in July 2010
	coordination with	-Project activity record	experts, other	l	(35m pier, cargo handling equipment, etc.): This Follow-up program has provided the

Y	<del></del>				<del></del> -	
	with the other	Yen Loan and/or		stakeholders		facilities and equipment as the existing ones which were used by the Project all the way
	Project	Grand Project(s)				for its implementation.
,		and other	1			• Grant Aid Project: Signing of E/N in June 2012 for "The Project for Improvement of
		Japanese	,	[		Juba River Port" (205m pier, container yard, Administration office building, cargo
		Project(s).				handling, security and maintenance equipment), it was planned to start technical
						instruction using such facilities and equipment under the Grant Aid Project from 2 <sup>rd</sup>
						phase of the Project; however the existing ones have been used due to the delay of
						this program.
ļ						Group and Region-Focused Training from 2012 to present: "Sustainable Port
; <u> </u>						Development and Planning for Port Engineer": This program has been targeting to make
]			i I			the participants take the capability to lay down the action plan against various issues
						relate to the port development.
<u> </u>	Accordance	Priority and/or	·National Development Plan in	National Development	•Document review	The basic policy for the year from 2013 to 2017 in Transport Sector Plan, South
(Relevance)	of Project	position of the	the sector and maintenance	Plan	·interview	Sudan (MOT/RSS, April 2013) prioritizes the establishment of the effective distribution
ee e	intending	sector in the	plan	-Sector Development		network, offering the safe transport service and strengthening the management
=	effect to the	national policy,		Plan, etc.		capacity of MOT. Furthermore, development of economic infrastructure such as
ľ	national policy	such as national				transport is listed as a priority area to be highlighted in Joint evaluation mission report
		development plan				(2005 - 2011), which is Framework of north and south Sudan development and
		and others.				formulated by CPA (Comprehensive Peace Agreement). Therefore such policies
- 1						correspond to the Project which has been targeting to 1) "Inland water transport in
i						South Sudan is facilitated and its capacity enhanced." 2) "Management capacity of
1	i					Juba port is continuously strengthened." and 3) "Port management system established
Į						at Juba port is continuously shared among the ports in South Sudan."
1	Accordance	Relevancy with	-Priority aid issue	-JICA Project	·Document review	In June 2012, the Government of Japan adopted two prioritized development issues to
ŀ	to Japanese	the priority aid	•Project implementation policy	Implementation Plan,	-Interview	South Sudan; 1) The development of infrastructure, 2) Enhancement of the governance,
	Aid Policy	issue and project		etc.		in a rolling plan. "Program for developing infrastructure" is one of Cooperation Programs
		implementation				to South Sudan based on the rolling plan. Through the Program, the Government of
1		policy of Japan.				Japan intends to support the development of infrastructure which promotes a
						continuous economic growth in Juba and foous on activities to reduce regional
<u> </u>						differences for the consolidation of peace. (Commented by the Mid-term Review)
- (	Accordance	Relevancy with	•Traffic density on each	·Transport statistics	•Document review	Concerning the needs of the Ports in South Sudan, the handling cargo volumes were
	to needs of	the needs for	transport mode	·C/P, Japanese	·Interview	expected to increase in each port such as Juba port in South Sudan as the rapid
	target group	transport sector.	-Needs for river transport	experts, other		development after the independence. In such situations, management capacity of ports
		especially river		stakeholders		needs to be strengthened and the need to implement the Project in ports is high.

	transport		<u> </u>		(Commented by the Mid-term Review)
Relevance of	Relevancy of the	-Awareness of stakeholders	·Deteiled Planning	-Document review	•If various subjects are cleared on 1) Institutional and Legislative Aspects, 2) P
Project	Project epproach	1	Survey Report	•Interview	Management Aspects and 3) Cargo Handling and Operation Aspects by three (
approach to	to Project		·C/P, Japanese		both Project Purpose and Overall Goal will be achieved naturally therefore the
achieve	Purpose and		experts, other		of the Project is suitable; however the pre-condition and important assumption
Project	Overall Goal		stakeholders		"Public security in South Sudan is not deteriorated." and "The project of improv
Purpose and	i				Juba River Port(Grant Aid Project) are implemented without serious delay." are
Overall Goal					to be complied with; therefore it is difficult to examine the consistency by com
					the present situation of the Project.
Reference: Proj	ect Purpose "Manage	ement capacity of Juba port is st	rengthened" and "Port ma	nagement system establ	shed at Juba port is shared among the ports in South Sudan"
		in South Sudan is facilitated and it		•	• • • • • • • • • • • • • • • • • • • •
Superiority of	Was Japanese	· Awareness of stakeholders	-C/P, other	•Document review	• Container Volume of Japan is top seven (7) in the world according to the statis
Japanese	experience on	•	stakeholders	-Interview	the World Bank in 2012. It means that the level of port management and oper
Technology	the sector				the highest level in the world.
	applied				• There are various past records in the port sector for ODA by related consultan
	effectively?				Japan, such as the Overseas Coastal Area Development Institute of Japan (OC
•				1	leading firm among them, which has also an experience to work for the technic
					cooperation project on the river port for Mekong River in Phnom Penh, Cambod
Consistency	Effectiveness	-State of coordination with	•Report of other	·Document review	• There is no case of the Yen Loan Project related to the Project, but the Urgen
with the other	and efficiency on	the other assistance	assistance	•Interview	Development Study ant its Follow-up Cooperation, the Grent Aid Project and the
Japanese	coordination with		Project Report		and Region-Focused Training have been assisting to provide an infrastructure,
assistance	Yen Loan and/or				equipment and human resource development for the port sector respectively. T
	Grand Project(s)				of implementation of the Grant Aid Project for providing facilities and equipment
	and other				of the serious factor of interference of the Project.
	Japanese				
	Project(s).				
Relevance	Dagree of	·Present situetion of the	·White Paper of the	-Document review	• The river transport is important for the relief supply of the UN and repatriated
with domestic	contribution to	sector	sector	•Interview	more than the development of domestic industry. Although the traffic volume by
situation	domestic industry				vessels has been decreasing due to the logistic stagnation with Sudan, the tran
					small boats has been contributing to carry food and daily commodity. When the
					with Sudan improves, it is expected to increase the traffic volume by river trans
					therefore it is expected to contribute to the industrial development in addition to
	Degree of	·Traffic density on each	·Transport statistics	-Document review	• Even though there are no data for comparison with the other mode of transpor

	compare to the other mode of transport				road network which is very poor condition.
Did Project Purpose achieved by contribution of this Project?	Was Project Purpose achieved? (Verification of achievement)	-Verification of achievement (as stated above)	•Verification of achievement (as stated above)	-Verification of achievement (as stated above)	•Verification of achievement (as stated above)
	Were the achievement of the indicators of Project Purpose result of outputs of the Project?	<ul> <li>Verification of achievement (as stated above)</li> <li>Awareness of stakeholders</li> </ul>	-Verification of achievement (as stated above) -C/P, Japanese experts, other stakeholders	Verification of achievement (as stated above)     Interview	-Verification of achievement (es stated above) -Relevance (as stated above)
	Was the logicality of achiavement of Project Purpose resulted from outputs secured? (Relevancy: as etated above)	· Ralevancy: as stated above	- Relevancy: as stated above	· Relevancy: as stated above	- Relevance; as stated above
the contribution or interference	counterpart are not transferred or resigned.	-C/P allocation situation -Progress of the Grant Aid Project	·C/P Allocation List ·Progress Report of the Grant Aid Project ·C/P, Japanese experts, other stakeholders	-Document review -Interview	<ul> <li>Although there were some personnel transfers at the central and state governments; therefore it is difficult to say that the necessary matters related to TF1 and TF2, such as 1) Institutional and Legislative Aspects and 2) Port Management Aspects were not shared with their successors properly. On the other hand, there were not significant personnel transfers at TF3.</li> <li>The delay of the grant aid project has interfered seriously especially to the activity schedule for TF2 and TF3; however there are some appearance of outputs as a result of the efforts by the experts and C/P who have been working with the existing facilities and equipment, and by the OJT as much as possible.</li> </ul>
	Purpose achieved by contribution of this Project?  Availability of the contribution or interference to achieve the Project	other mode of transport  Did Project Purpose achieved by contribution of this Project?  Were the achievement of the indicators of Project Purpose result of outputs of the Project?  Was the logicality of achievement of Project Purpose resulted from outputs secured? (Relevancy: as etated above)  Availability of the contribution or interference to achieve the Project of improvement of Purpose  University of the project of improvement of Juba River Port (Grant Aid Project) are implemented	Other mode of transport  Did Project Purpose achieved by contribution of this Project?  Were the achievement of the indicators of Project Purpose result of outputs of the Project?  Was the logicality of achievement of project Purpose resulted from outputs secured?  (Relevancy: as etated above)  Availability of the counterpart are contribution or interference to achieve the Project of improvement of Project of improvement of Project of improvement of Project)  Authorized Purpose resulted from outputs secured?  (Relevancy: as etated above)  Availability of the counterpart are not transferred or resigned.  The project of improvement of Purpose  Juba River Port (Grant Aid Project) are implemented	other mode of transport  Did Project Purpose achieved by contribution of this Project?  Were the achievement of the indicators of Project Purpose result of outputs of the Project?  Was the logicality of achievement of Project Purpose resulted from outputs secured?  (Relevancy: as etated above)  Availability of the contribution or interference to achieve the Project of Project of Project of Project of Improvement of Units River Port (Grant Aid Project) are implemented	Other mode of transport  Did Project Purpose achieved by contribution of this Project?  Were the achievement of the indicators of Project Purpose result of outputs of achievement of Project Purpose resulted from outputs sacured? (Relevancy: as atteed above)  Availability of the contribution or interference to achieve the Project of Eproject of Improvement of Impro

		Assumption)		<u> </u>		
qua qua timi rela ger	Properness of quality, quantity and timing of input related to generated Output	Properness of quality, quantity, timing and source organ of Japanese experts ( Verification of achievement: as mentioned above)	-Verification of achievement (as stated above)	·Verification of achievement (as stated above)	-Verification of achievement (as stated above)	· Verification of achievement (as stated above)
		Properness of quality, quantity and timing of provision of equipment ( Verification of achievement as mentioned above)	·Verification of achievement (as stated above)	-Verification of achievement (as stated above)	-Verification of achievement (as stated above)	·Verification of achievement (as stated above)
		Properness of quality, quantity and timing of C/P training in Japan ( Verification of achievement: as mentioned above)	•Verification of achievement (as stated above)	·Verification of achievement (as stated above)	-Verification of achievement (as stated above)	- Verification of achievement (as stated above)
		Properness of quality, quantity and skill of C/P ( Verification of achievement)	-Verification of achievement (as stated above)	-Verification of achievement (as stated above)	•Verification of achievement (as stated above)	-Verification of achievement (as stated above)
		Properness of quality, scale and convenience of	-Verification of achievement (as stated above)	Verification of     achievement (as     stated above)	<ul> <li>Verification of achievement (as stated above)</li> </ul>	-Verification of achievement (as stated above)

	building and facility ( Verification of achievement)				
Properness of budget scale to Project	Properness of cost compared to similar project	Total cost to the Project Outputs, Project Purpose, population of beneficiaries and other factors of the similar project Total cost to the similar project	Project Report Similar project report C/P, Japanese experts, other stakeholders	-Document review -Interview	(Establishment of National Port Policy and Administration System in Cambodia)  > Overall Goal: Port development and administration can be conducted according to National Port Policy.  > Project Purpose: Capacity of planning for National Port Policy and administrative management is developed.  > Long-term expert: O Short-term expert: 9 C/P training in Japan: 35  • This Project in Cambodia did not act for the activity related to TF3 related to the carg handling and operation, and a long-term expert, in parallel, implemented a policy assistance to the central government; therefore it can be said the scale of the Project is proper size compare to similar project.
Coordination with other Project	Coordination with Yen Loan	·Existence of coordination, level and contents	-Experts -JICA Office -Related Documents	-Document review -Interview	No coordination with the Yen Loan Project.
	Coordination with Development Study	Existence of coordination, level and contents	-Experts -JICA Office -Related Documents	-Document review -Interview	• Juba Urban Transport Infrastructure and Capacity Development Study and its Follow-up cooperation (a pier of 35m in length and cargo handling equipment) in July 2010: This Follow-up program provided the necessary facilities and equipment for the Project. The Project has been working with the benefit from this program.
	Coordination with Grant Project	-Existence of coordination, level and contents	·Experts ·JCA Office ·Related Documents	-Document review -Interview	Grant Aid Project: Signing of E/N in June 2012 for "The Project for Improvement of Juha River Port" (205m pier, container yard, Administration office building, cargo handling, security and maintenance equipment): It was scheduled to use the facilities and equipment which will be provided under this assistance from 2 <sup>rd</sup> phase; however the Project should use the existing facilities and equipment because of the delay of the grant aid project.
	Coordination with the other Technical Cooperation Project	-Existence of coordination, level and contents	-Experts -JICA Office -Related Documents	-Document review •Interview	• No coordination with the technical cooperation
	Coordination with individual	<ul> <li>Existence of coordination, level and contents</li> </ul>	·Experts ·JICA Office	Document review     Interview	No coordination with the individual expert

	expert(s)	_	·Related Documents		1
ļ.	Coordination with	·Existence of coordination,	-Experts	•Document review	+No special coordination with the UN
	the other donor	level and contents	-JICA Office •Related Documents	·Interview	
Availability of the contribution or interference to Efficiency	Effectiveness of coordination with Yen Loan, Grant Aid Project and other Japanese Aid.	- Relevancy; as stated above	- Relevancy: as stated above	Relevancy: as stated above	- Relevancy: as stated above
	Effective contribution of management system such as periodical meetings, JCC to efficient management.	• Awareness of stakeholders	•Project Report •C/P, Japanese experts, other stakeholders	-Document review -Interview	<ul> <li>JGC were held five (5) times and the 6th JCC was organized at the Terminal Evaluation Study. Brief summaries of each JCC were as follows;</li> <li>&gt; 1* in May 2011: As a kick-off meeting, the overall purpose and framework from phase 1 to 3, contents of PDM, especially the baseline setting, and a concrete way of technical transfer in the phase 1 were discussed and confirmed.</li> <li>&gt; 2th in February 2012: The results at the 1st phase were reported and issues and the future corrective strategy toward an achievement of project purpose was discussed.</li> <li>&gt; 3th in June 2012: The purpose and importance of the 2th phase in the whole Project, basic policy of technical transfer, the concrete way of technical transfer mainly by OJT, the response to corrective strategy proposed at the 2th JCC and the training plan including the third country training were discussed based on the work plan which was provided at the 2th phase.</li> <li>&gt; 4th in February 2013: The progress in the first half of 2th phase and important matter in the second half were confirmed and matters related to the Mid-term Review were discussed, such as the revision of PDM.</li> <li>&gt; 5th in November 2013: The previous progress of activities and corrective strategy were the main agenda as a wrapping up JCC for the 2th phase. Therefore, the presentations related to assessment and suggestions for improvement were made by JRPA side in parallel to the JICA Project team.</li> <li>&gt; 6th in April: The matters related to the Project termination were discussed with the Terminal Evaluation Study mission during the first site activities just after the dismantling of control of expert dispatch to the Project site due to deterioration in the security situation. The present situation of the Project was summarized and the future issues were discussed.</li> </ul>

						• The major personalities from RSS as the central government, CES as the state government and JRPA as the front line of port management authority were allocated into the three (3) Task Forces, such as TF1: Institutional and Legislative Aspects, TF2: Port Management Aspects, TF3: Cargo Handling and Operation Aspects and furthermore, four (4) Working Groups, such as WG1: Port Operation, WG2: Cargo Handling and Safety, WG3: Maintenance of Port Facility and Equipment, WG4: Security and Port related Services and the Workshop of statistics were organized to clarify the sharing of roles and raise awareness of involved persons.
(Impact)	Possibility of active ment of the overall goal	Possibility of achievement of the overall goal (Achievement)	Verification of achievement     (as stated above)	-Verification of achievement (as stated above)	Verification of achievement (as stated above)	Verification of achievement (as stated above)
	Availability of the interference to achieve Overall Goal	The budget for developing river ports is secured. Port development policy does not change drastically. (Important Assumption)	Budget of C/P organization     National Development Plan     Development plan of the sector	National Development Plan Development plan of the sector Project Report C/P, Japanese experts, other stakeholders	-Document review -Interview	The budget for developing river ports is secured.  Although it is expected to provide such budget as much as possible, it is difficult to secure all expense which is very high cost projects, such as the facilities of port, dredging and so on.  Port development policy does not change drastically.  The Government of South Sudan has a realization to improve the port management capacity in order to operate smooth cargo trensport as the most important matter; therefore it is expected that the port development policy does not change drastically in the future.
		Other availability of the contribution or interference	•	•	•	•Recovery of the river transport is closely related to the situation between North-South, there is no clear idea as an interference. It is impossible to achieve the overall goal only by the development of primary ports, like the port of Juba. It is obviously necessary to secure the pre-condition "Public security in South Sudan is not deteriorated."
	Does achievement of the Overall goal resulted from contribution of	Was logicality between Overall Goal and Project Purpose secured?	·Awareness of stakeholders	-Detailed Planning Survey Report -O/P, Japanese experts, other stakeholders	•Document review •Interview	Both conditions such as Pre-condition and "Activation of economic activity towards the facilitation of river transport including domestic cargo distributions" are necessary to secure the logicality between the Overall Goal and Project Purpose. Although it is difficult to judge because the transport capacity and economic performance are both adjacent sides, it is expected that the transport capacity will make a contribution to accelerate the economic activity.
	the Project?	Availability of effect to policy	·Awareness of stakeholders	-Project Report -C/P, Japanese	•Document review •Interview	The basic policy for the year from 2013 to 2017 in Transport Sector Plan, South Sudan (MOT/ESS, April 2013) prioritizes the Establishment of the effective distribution

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		institution in MOT by the Project.		experts, other stakeholders		network, offering the safe transport service and strengthening the management capacity of MOT. Furthermore, development of economic infrastructure such as transport is listed as a priority area to be highlighted.
		Availability of effect to financial aspect of JRPA by the Project				*According to the agreement between MOT/RSS and MOPI/CES in June 2009, after the revenue of JRPA is saved in the central bank, 60% of the revenue is provided to JRPA and the rest of 40% to GOSS and MOPI/CES respectively. However, the revenue has not been allocated as mentioned above. The Project has been performing various examinations to establish an independent accounting system. Based on the outcomes, it is expected that an accounting system like this will be established in order to secure the budget for the future.
		Availability of effect to technical factors such as quality, level and management system by the Project.	•Awareness of stakeholders .	•Project Report •C/P, Japanese experts, other stakeholders	-Document review -Interview	JRPA's motivation to sort out problems and issues has been raised through the Project and they started activities with their own initiatives. The management capacity of JRPA staff has been strengthened through OJT and other activities. It is expected that the Project maintains the motivation and incentive of JRPA staff. As the technical transfer based on the manual was made, it is also expected that such manual is utilized more in the future.
		Availability of environmental impact in South Sudan by the Project.	·Awareness of stakeholders	-Project Report -C/P, Japanese experts, other stakeholders	Document review     Interview	• This Project is to assist in the field of port management; therefore there is no negative effect on the water pollution. On the other hand, the Project has been working on oil spill prevention which means the contribution to the environmental preservation. But, as it is issues in the field of vessel operation, the ballast water and oil discharges from vessels may not be unable to disregard when the volume of river transport is increased even though this is not the direct effect of this Project.
		Availability of the other impacts both negative and positive.	· Awareness of stakeholders	Project Report C/P, Japanese experts, other stakeholders	•Document review •Interview	•N/A
(Sustainability)	Continuity of political support	Degree of expectation of continuous positioning of the sector as high priority by the	National Development Plan     Development plan of the     sector     Awareness of stakeholders	-National Development     Plan     -Development plan of     the sector     -C/P, Japanese     experts, other	•Document review •Interview	Verification of Impact (as stated above)

	central		stakeholders		
	government and	!	Į		
	C/P organization.				
Availability of	Availability of	·Budget of C/P organization	·Project Report	·Document review	• The expert team provided the manual "Juba River Port Administration Operation-Man
C/P capacity	capacity of	· Allocation and fixation	·C/P, Japanese	·Interview	related to all the Outputs which were defined in the PDM with a purpose to satisfy a
to continue	operational	situation of C/P	experts, other		shortage of activities at site. This manual will contribute to let JRPA keep on working
duties	management by	-Management capacity of	stakeholders		based on the Outputs.
	C/P organization	C/P organization	]		(As reference: Contents of the Manual)
	after completion				1. General Affairs and Administration Department
	of the Project.				2. Budget and Accounting Department
					3. Operation and Statistics Department
	ļ				4. Risk Management and Environment Department
					5. Mechanical Cargo Handling Department
					6. Maintenance Department
	Availability of	·Budget of C/P organization	-Project Report	·Document review	*It is almost expected to complete technical transfer related to the maintenance and
	capacity of	·Allocation and fixation	·C/P, Japanese	·Interview	operation of the existing facilities. Furthermore, it will be completed related to the
	maintenance of	situation of C/P	experts, other		equipment and of the new facilities and equipment which will be provided by the gran
	facility and	<ul> <li>Technical capacity of C/P</li> </ul>	stakeholders		aid project based on the said manual during 3rd phase. Such activities will lead a project
	equipment by	organization			maintenance and operation.
	C/P organization		ļ ·		
	after completion			i i	
	of the Project.				
	Availability of	·Budget of C/P organization	-Budget Plan of C/P	·Document review	Verification of Impact (as stated above)
	financial capacity		organization	-Intarview	
	af C/P		-Project Report		
	organization after		-C/P, Japanese		
	completion of the		experts, other		
_	Project.	<u></u>	stakeholders		
Possibility of	Possibility of	·Comment of stakeholders	·C/P, Japanese	-Document review	• It is expected that well understanding of the said manual "Juba River Port Administra
high fixation of	spread of		experts, other	•Interview	Operation-Manual by C/P and sharing to the successors to take root in the
transferred	transferred	!	stakaholders	İ	implementation organizations of the Project. However the level is to assume the com
technology	technology in the				facilities and equipment; therefore it may be possible to add some sort of technical
	organization.				assistance at the completion of the new facilities and equipment in the future.
Continuity of	Possibility of	·Comment of stakeholders	-Project Report	Document review	• The cooperation body is only JICA at present.

# Appendix 07

 cooperation	continuity of	-C/F	P, Japanese	·Interview		· · · · · · · · · · · · · · · · · · ·
system by	assistance by the	ex	perts, other			
other related	other aid bodies	sta	akeholders			
body	(danor etc.)					

#### 2. 質問票(和文、英文)

【質問票:日本人専門家用】

南スーダン国内水輸送運営管理能力強化プロジェクト終了時評価調査

プロジェクト専門家メンバー各位

今般、「南スーダン国内水輸送運営管理能力強化プロジェクト終了時評価調査」に係る終了時評価調査が2015年4月6日から16日の日程で実施されることとなりました。この終了時評価調査に先立ち、事前にプロジェクトに対する皆様のご意見や必要な情報を収集させて戴きたく、以下のとおり質問票を準備致しましたので、宜しくご回答方、お願い申し上げます。

ご承知の通り、JICA のプロジェクト評価は、援助プログラムの円滑な実施や得られた教訓のフィードバック、日本国民への援助効果の説明責任を果たすために行われます。評価の方法は「JICA 事業評価ガイドライン」に沿って、世界中の JICA プロジェクト共通の枠組みで行われます。

また、今回の終了時評価では、以下の点も大切な目的と考えております。

- 1) これまでプロジェクトチームが積み上げてこられた成果を整理すること
- 2) 今次のプロジェクトの状況を総括し、特に自立発展性確保の観点からプロジェクト終了後の追加支援などの実施の妥当性の検証材料を収集すること

なお、誠に勝手ながら時間の都合上、4月5日までに以下の小生のメールアドレス宛、ご返送頂けますよう、お願い申し上げます(可能であれば、できる限り早めに対応戴けますと幸甚です)。

質問票は、おひとりずつ別にご回答下さい。

当方の理解不足のために、質問の意味が不明の箇所もあるかもしれませんが、その場合には「意味不明のため回答せず」と欄内にご記入下さい。

何卒よろしくお願い申し上げます。

JICA 終了時評価調査団 大前 正也

お名前:
ご担当分野:
プロジェクト従事期間: 年間( 年 月~ 年 月)
A.実績の検証:詳細は別途「投入実績」として情報収集依頼をしておりますが、全体的な観点からの
回答をお願い致します。
(1) 本プロジェクトの投入(専門家、機材、C/P 研修)は計画通り実施されましたか。
a)口 計画通り実施された
b) 🗆 やや計画からは逸脱したものの、大きな問題はなかった
c) □ 計画通りに実施できなかったため、プロジェクト運営に支障があった
c)とお答えの場合、その理由をご教示下さい。 ;
(0) 录出 录引 英语大切杂志 子 本 4
(2) アウトプットは計画通り産出されましたか。
a) □ 計画通り産出された
b)ローやや計画からは逸脱したものの、大きな問題はなかった
c)口 計画通りに産出できなかった
c)とお答えの場合、その理由をご教示下さい。
のC83日元の7個日、C97年日をC4Xが下でい。
(3) プロジェクト目標(①ジュバ港の港湾管理能力が強化される。 ②ジュバ港で構築された港湾管
理手順が南スーダン各港間で共有される。)は達成されますか。
a) □ 既に達成されている
b) ロ プロジェクト期間内に達成される
c) □ 達成の見込みはない
c)とお答えの場合、その理由をご教示下さい。
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(4) 上位目標(南部スーダンにおいて内水輸送が円滑化され、輸送能力が拡大する。)の達成見

込みはありますか。

a) 口 十分に達成見込みはある
b) 🗆 追加的な措置を講ずることにより、達成の見込みがある
c) 口 達成の見込みはない
b)または c)とお答えの場合、その理由をご教示下さい。
(5)プロジェクト活動に関する日-南ス一ダン協働体制に問題はありませんでしたか。 、
a) <a>□ 問題なし</a>
b) 口 やや問題があったものの、大きな阻害要因ではなかった
c)口 致命的な問題であったため、プロジェクト運営に支障があった
b)または c)とお答えの場合、その理由をご教示下さい。 
B.実施プロセスの検証:詳細は別途「活動実績一覧表」として情報収集依頼をしておりますが、全体
的な観点からの回答をお願い致します。
(6) プロジェクトのマネジメント体制(モニタリングの仕組み、意思決定過程、JICA 本部・在外事務所
の機能、プロジェクト内のコミュニケーションの仕組みなど)に問題はありませんでしたか。
a) ロ まったく問題はなかった
b) 🛘 やや問題があったものの、大きな阻害要因ではなかった
c) 口 致命的な問題であったため、プロジェクト運営に支障があった
b)または c)とお答えの場合、その理由をご教示下さい。

C. <del>妥</del> 当性
(7)南スーダンの政策、法や社会情勢、国際情勢、または JRPA 内部の変化等によって、プロジェク
トの重要度と優先度に変化がありましたか。
a) ロ より高くなった
b) 🛘 変化はない(引き続き重要かつ優先度は高い)
c) 口 低下した
a)または c)とお答えの場合、その理由をご教示下さい。
(8) 本プロジェクトの実施機関として JRPA が選定されていますが、今後もプロジェクトの実施機関とし
JRPA を選ぶことが引き続き妥当でしょうか。
a) □ 実施機関として JRPA 以外は考えられない
b) □ 他機関にも可能性はあるが、JRPA で不都合な点はない
c) □ 他にもっと適切な機関がある
b)または c)とお答えの場合、その理由(具体的な他の機関等も含め)をご教示下さい。 
(9)本プロジェクト実施前と比較して、JRPA の組織・体制は強化されたでしょうか。
a)□ 強化された ト)□ 恋からない/Plさばさみかけれるパネ声をだちなます。
b) □ 変わらない(引き続き強化するべき事項が存在する)
c)□ 不明である
りまればらしい答うの担合。その理由もご教ニ下さい
b)または c)とお答えの場合、その理由をご教示下さい。
L
(10) 本プロジェクト活動分野に関して、日本の優位性はあったでしょうか。
(TO) 本プロジェクト活動分野に関して、日本の後位性はのづたでしょうか。 a) □ 優位性はあった
a) □ 複位性はめつに b) □ 他国が優位な面もあったが、全体的には日本に優位性があった
b) □ 他国が愛位な面ものつだが、主体的には日本に変位性がのつだ c) □ 優位性はなかった
したロー酸性性はながった。

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D.有効性
(11)プロジェクト活動から成果に対しての外部条件(南スーダン主要港の港湾組織にプロジェクトのカ
ウンターパートとなる人材が配置される。)の影響はありましたか。
a)口 問題なかった
b) 🗆 一部問題があった
c)口 外部条件が満たされなかったため、プロジェクト運営に支障があった
b)または c)とお答えの場合、その理由をご教示下さい。
(
トが必要数配置され、頻繁に異動、離職しないこと。 ②ジュバ河川港拡充計画(無償資金協力)が
予定から大幅に遅延することなく実施される。)の影響はありましたか。
a) □ 問題なかった
b) □ 一部問題があった
c) □ 外部条件が満たされなかったため、プロジェクト運営に支障があった
b)または c)とお答えの場合、その理由をご教示下さい。
(13)プロジェクト目標(①ジュバ港の港湾管理能力が強化される。 ②ジュバ港で構築された港湾
管理手順が南スーダン各港間で共有される。)に対する阻害要因はありましたか。
a) ロ なかった
b) 口 部分的にあった
c) □ 致命的な阻害要因の存在により、プロジェクト運営に支障があった
b)または c)とお答えの場合、その理由をご教示下さい。 
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E.効率性						
【D-1】プロジェクトの成り	果を達成するために、	、以下	の投入の量・	質·投入σ	タイミ	ングは適切でした
か。						
(14) これまで派遣され	た専門家					
人数		□遊	切だった	□概ね適	切	□改善すべき
専門分野と任務のマッチ	ニング	□適切だった		□概ね適切		□改善すべき
派遣時期		□遊	切だった	□概ね適切		□改善すべき
派遣期間		□遊	切だった	□概ね適切		□改善すべき
専門能力		□遊	切だった	□概ね遃	切	□改善すべき
コミュニケーション能力(	語学力含む)	□遊	切だった	□概ね遃	切	□改善すべき
改善すべき部分について	ての提言 <b>を</b> お書き下さ	えい。 ・				
·						
(15) 日本でのカウンター	ーパート研修					
事前説明	□適切だった		□概ね適切		口改	善すべき
人数	□適切だった		□概ね適切		□改善すべき	
研修専門分野	□適切だった		□概ね適切		口改	善すべき
研修内容	□適切だった		□概ね適切		口改	善すべき
研修実施時期	□適切だった		□概ね適切		口改	善すべき
研修期間の長さ	□適切だった		□概ね適切		口改	——— 善すべき
フォローアップ	オローアップ 口適切だった		□概ね適切		口改	善すべき
改善すべき部分について	ての提言をお書き下さ	ない。				
(16) これまでに支出さ	れた JICA プロジェクト	経費	について(日本	人 <b>専門家</b> の	のみ)	
金額	□適切だった		□概ね適切		□改善すべき	
支出時期 口適切だった			□概ね適切		□改善すべき	
改善すべき部分について	ての提言をお書き下さ	ヹ゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚゚				

# 【D-2】南スーダン側の投入の適切さについて

## (17) これまで配置された南スーダン側のカウンターパート職員について

(11) -100 CHORECIO	-1134 . h = hd		• •			
人数		□適切だった	□概ね	適切	□改善すべき	
専門分野と任務のマッチ	□適切だった	□概ね適切		□改善すべき		
技術移転を受けるうえで	□適切だった	□概ね適切		□改善すべき		
配置時期		□適切だった	□概ね適切		□改善すべき	
配置期間		□適切だった	□概ね	適切	□改善すべき	
コミュニケーション能力(	語学力含む)	□適切だった	□概ね		□改善すべき	
改善すべき部分について	の提言をお書き下さい	0				
(18) プロジェクト実施現	場の敷地、建物、設備	について				
広さ	□適切だった	□概ね適切		□改善	きすべき	
機能	□適切だった	□概ね適切		口改善	等すべき	
提供された時期	□適切だった	□概ね適切		□改善	きすべき	
改善すべき部分について	ての提言をお書き下さい	¹a				
(19) これまでに支出され	・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	<b>費</b> について				
金額	□適切だった	□概ね適切		□改善	<b>等すべき</b>	
支出時期	□適切だった	□概ね適切		□改割	ますべき	
改善すべき部分について	ての提言をお書き下さい	١.				
【D-3】プロジェクトを支援する仕組み (20) 合同調整委員会はプロジェクト実施のために有効に機能しましたか。 a) □ はい b) □ いいえ c) □ 情報がないのでわからない						
「いいえ」とお答えの場合	「いいえ」とお答えの場合、提言をお書き下さい。					

(21) 日本国内の支援(JICA 本部、JICA 国内センター等)はプロジェクト実施のために有効に機能し
ましたか(日本人専門家のみ)。
a) 🗆 はい
b) 🗆 いいえ
c)□ 情報がないのでわからない
「いいえ」とお答えの場合、提言をお書き下さい。
(22) JICA 南スーダン事務所の協力は十分でしたか。
a) 🗆 はい
b) 🗆 いいえ
c)□ 情報がないのでわからない
「いいえ」とお答えの場合、提言をお書き下さい。

F.インパクト
(23) プロジェクトを実施したことにより発現したポジティブあるいはネガティ <b>ブなインパクト(影響や効</b>
果)はありますか、あるいは予想されますか。
a) ロ ポジティブなインパクトがある(予想される)
b) ロ ネガティブなインパクトがある(予想される)
c) 口 情報がないのでわからない
a)または b)とお答えの場合、その理由(具体的な例も含め)をご教示下さい。
(24) プロジェクト目標から上位目標に至るまでの外部条件(①港湾開発に係る財源が確保される。
②港湾開発に係る政策が大幅に変更されない。)の影響はありましたか。
a) □ 問題なかった
b) □ 一部問題があった
c)  「外部条件が満たされなかったため、プロジェクト運営に支障があった
b)または c)とお答えの場合、その理由をご教示下さい。
(25) 上位目標(南部スーダンにおいて内水輸送が円滑化され、輸送能力が拡大する。)に対する
本プロジェクトの効果として、具体的にどの様なものが考えられますか。ご意見をお願いします。

G.自立発展性
【プロジェクトの効果の持続性:組織面】
(26) JRPA が今後も存続していく上で、もしくは更なる活動の実施、組織・体制の強化を行っていく上
で影響のある、法制度等における大きな変化はありますか。
a) 🗆 はい
b) 🗆 いいえ
c) 口 情報がないのでわからない
「はい」とお答えの場合、その具体的内容をご教示下さい。
【プロジェクトの効果の持続性:技術面】
(27) プロジェクト期間の終了後も JRPA 職員はプロジェクトで習得した能力(知識と技能)を職員とし
ての任務に活用し続けると思いますか。
a)口(はい
b)口 いいえ
c) 口 全く想定できない
「いいえ」とお答えの場合、その理由と改善のためのご提案をご教示下さい。 [
(28) プロジェクト期間中、及び終了後、プロジェクトで供与した機材の活用のための手段はカウンター
パートへ引き継がれていますか。あるいはプロジェクト終了までに確立する予定ですか。
a)□ はい、またはプロジェクト終了までに引継ぎ見込みである
b) ロ いいえ
c) ロ わからない
「いいえ」「わからない」とお答えの場合、その理由と改善のためのご提案をご教示下さい。 

【プロジェクトの効果の持続性:人材面】

(29)プロジェクト期間中、及び終了後も JRPA 独自で適切な人材を雇用し配置していくことが可能と

予想されますか。
a) 口 はい
b) ロ いいえ
c) 口 全く想定できない
「いいえ」とお答えの場合、その理由と改善のためのご提案をご教示下さい。
【プロジェクトの効果の持続性:財務面】
(30) JRPA の活動の財源は、プロジェクト期間中、及び終了後も確保されると見込めそうですか。
a) 🗆 itu
b)ロ いいえ
c) □ 全く想定できない
「いいえ」とお答えの場合、その理由と改善のためのご提案をご教示下さい。
(31) プロジェクト中、及び終了後にその効果の持続性に影響を与える、その他の貢献・阻害要因が
あればコメント下さい。 
(32) その他
このプロジェクトの経験を踏まえて、今後、南スーダンで JICA のプロジェクトを実施するうえで、改善す
べき点、協力の要望・要請、あるいは港湾分野で類似の協力を行ううえで留意すべき点や改善すべ
き点を教訓としてご教示下さい。 

## (資料依頼)

今般の終了時評価で本件プロジェクトの実績等を検証するために、以下の資料のご準備をお願い致します。 PDM の指標入手手段を参考にしておりますので、ご準備できていない資料につきましては、インタビュー等で対応させて戴きます。また全て詳細は不要で、現状が把握できるサマリーで結構です。

- 01) 南スーダン各港湾の取扱貨物量
- 02) JRPA 各部の運用記録
- 03) 南スーダンにおける港湾管理法体系案
- 04) 港湾運営管理報告書
- 05) 予算要求書類
- 06) 港湾タリフ案及び貸付規則案
- 07) 施設点検マニュアル
- 08) 施設台帳
- 09) ジュバ港のバース水深測定・記録
- 10) 新施設対応荷役マニュアル
- 11) バース調整システム
- 12) 荷役サービス規則案
- 13) 港湾関連サービスの供給者に関する規則案
- 14) 港湾内の保安計画案及び研修及び訓練の実施記録
- 15) 消火・消防訓練計画書及び訓練実施記録
- 16)油流出等災害に対する危機管理計画書
- 17) 油流出災害等を想定した訓練実施記録
- 18) 港湾統計データ収集マニュアル
- 19) 統計データベース
- 20) 簡易な港湾統計書
- 21) 輸送モード別交通量
- 22) C/P 機関予算推移(5年間程度)
- 23) C/P 配置及び定着状況(プロジェクト実施期間中)

ご協力まことに有難うございました。

(Questionnaire for the JICA Project "The Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan")

Dear Sirs concerned with the JICA Project,

The Japanese terminal evaluation study team will be dispatched from April 6th to 16th of 2015 to evaluate the Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan (hereinafter referred as "the Project"). It is very significant for us to have your views and relevant information on the following questions in advance, so we wish you to write your answers or comments on this sheet.

We should ask you this request after a courtesy visit to your commanders. However, due to our limitation of official schedule of the study, it would be greatly appreciated if your good office accepts the way to conduct this questionnaire.

Though the importance and relevance of the Project are obvious, JICA has the accountability to the taxpayer of Japan for the proper implementation of each project by adequate feedback from the concerned personnel. The methodology of this evaluation is the same with all the other JICA's projects in the world, which is mentioned in Evaluation Guides by JICA.

Moreover, we recognize the points mentioned below are also important for this study.

- 1) To assist organizing the results accumulated by the Project team.
- 2) To conclude the present status of the Project and study on the relevance of additional assistance after the completion of the Project term so as to secure its sustainability for the future.

It will be appreciated that you fill up the answers and send these sheets to my e-mail address below by 5th of April.

Please answer the Questionnaire individually. If there is any incomprehensible question, please write "incomprehensible question" and leave them.

Masaya OMAE, JICA Evaluation Team,

Name:					
Position in charge in your organization and departments:					
Rank in your organization and departments:					
Field in charge on the JICA Project:					
Period of working for your organization and departments:					
( years (month/year: from / to / ))					
Period of working for the JICA Project: ( years					
( years (month/year: from / to / ))					
A. Verification of achievement: As the information in detail is requested in parallel such					
as "Achievement of Input", please kindly answer from general point of view.					
(1) Were the inputs from Japanese side, such as expert, equipment and C/P training in					
Japan, implemented as planned?					
a)   Implemented as planned					
b)   No serious problem although there were some derail					
c)   The Project was disturbed due to the serious derail from the Plan					
If you answered c), please describe the reason specifically in the following square.					
(2) Were the outputs produced as planned?					
a) 🗆 Produced as planned					
b) $\square$ No serious problem although there were some derail					
c)   The Project was disturbed due to the serious derail from the Plan					
If you answered c), please describe the reason specifically in the following square.					
(3) Will the Project Purpose ((a) Management capacity of Juba port is strengthened. (b)					
Port management system established at Juba port is shared among the ports in South					

Sudan.) be achieved?

a) 🗆 Already achieved
b) $\square$ Will be achieved within the Project period
c)   Will not be achieved
If you answered c), please describe the reason specifically in the following square.
(4) Will the Overall Goal (Inland water transport in South Sudan is facilitated and its
capacity enhanced.) be achieved?
a)   Expected to be achieved enough
b) $\square$ Expected to be achieved with additional measures
c)   No expectation to be achieved
If you answered b) or c), please describe the reason specifically in the following square.
(5) Is there any problem on cooperation between South Sudan and Japanese sides in the
activities on the Project?
a) 🗆 No problem
b) $\square$ No serious problem although there were some problem
c) $\square$ The Project was disturbed due to the serious problem
If you answered b) or c), please describe the reason specifically in the following square.

- B. Verification of implementation process: As the information in detail is requested in parallel such as "List of achievement of activities", please kindly answer from general point of view.
- (6) Is there any problem regarding the management system of the Project, such as monitoring system, decision making process, function of JICA HDQs/local office, communication in the Project, and so on?
  - a) 🗆 No problem
  - b)  $\square$  No serious problem although there were some problems
  - c) The Project was disturbed due to the serious problems

If you answered b) or c),	please describe	e the reason s	pecifically in the	following square.

C. Relevance
(7) Have there been any changes of the importance and priority of the Project caused by
any international subjects, South Sudanese policy, law or domestic subject, or any
change in JRPA?
a)   Higher than before
b) $\square$ No change (important and high priority as before)
c)   Lower than before
If you answered a) or c), please describe the reason specifically in the following square.
(8) Will it be relevant to cooperate with JRPA continuously as the implementing agency of the Project, if Japanese cooperation for Port Sector is provided in the future?  a) □ No options other than JRPA  b) □ There exists the other appropriate organizations, but JRPA also can be relevant c) □ There is the best one other than JRPA  If you answered b) or c), please describe the reason specifically (including other organizations) in the following square.
<ul> <li>(9) Comparing with the situation before the Project implementation, has JRPA been strengthened more as the organization?</li> <li>a) □ JRPA has been strengthened</li> <li>b) □ Unclear</li> </ul>

- c) 🗆 No change

If you answered b) or c), please describe the reason specifically in the following square.

- (10) Is there any advantage of the Japanese expert or technology in the field of the subject of the Project?
  - a) 

    Advantage of the Japanese expert or technology is existed
  - b) 

    Advantage of the Japanese expert or technology is existed totally although the other country was partially superior
  - c) 

    No superiority

If you answered b) or c)	, please describe	the reason	specifically	uncluding	other
countries name) in the follo	wing square.				
l					

D. Effectiveness
(11) Is there any influence in the process from "Activities" to "Outputs" by the important
assumption? (Counterpart staff are assigned at other six ports than Juba Port.)
a) □ No problem
b)   □ Partial problem was existed
c) $\square$ The Project was disturbed because the important assumptions were not secured
If you answered b) or c), please describe the reason specifically in the following square.
(12) Is there influence in the process from "Outputs" to "Project Purpose" by the
important assumption? ((a) Staff members of counterpart are not transferred or
resigned. (b) The project of improvement of Juba River Port (Grant Aid Project) are
implemented without serious delay.)
a) □ No problem
b)   □ Partial problem was existed
c) $\square$ The Project was disturbed because the important assumptions were not secured
If you answered b) or c), please describe the reason specifically in the following square.
(13) Is there any inhibiting element for the Project purpose ((a) Management capacity of
Juba port is strengthened. (b) Port management system established at Juba port is
shared among the ports in South Sudan.)?
a) D Nothing
b)   □ Existed partially
c) $\square$ The Project was disturbed due to the serious inhibitory element
If you answered b) or c), please describe the reason specifically in the following square.

E. Efficiency	$\mathbf{E}$ .	Effi	cier	1ÇY
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[D-1] The following questions are with regard to the Inputs on the Project in order to achieve the Outputs for the Project.

## (14) JICA's Experts

Numbers	□ Appropriate	□Nearly appropriate	☐ Something to be improved
Matching of their specialty	□ Appropriate	□Nearly appropriate	☐ Something to be improved
with the assignment			
Time of dispatch	□ Appropriate	□Nearly appropriate	□ Something to be improved
Period of dispatch	□ Appropriate	□Nearly appropriate	□ Something to be improved
Level of their capacity in	□ Appropriate	□Nearly appropriate	☐ Something to be improved
their specialty			
Communication	□ Appropriate	□Nearly appropriate	□ Something to be improved
skill(including language)			

If you have any recommendation for the improvement, please write it specifically.

## (15) Counterpart training in Japan

Briefing before training	□ Appropriate	□Almost appropriate	☐ Something to be improved
Numbers of trainee	□ Appropriate	□Almost appropriate	□ Something to be improved
Specialty focused on	☐ Appropriate	□Almost appropriate	□ Something to be improved
training			
Contents of training	□ Appropriate	□Almost appropriate	☐ Something to be improved
Time of training	□ Appropriate	□Almost appropriate	□ Something to be improved
Period of training	□ Appropriate	□Almost appropriate	□ Something to be improved
Follow up	☐ Appropriate	□Almost appropriate	☐ Something to be improved

If you have any recommendation for the improvement, please write it specifically.	

(16) Budget for the Project that has been disbursed by JICA (to be asked to the JICA Experts only).

## [D-2] Appropriateness of the inputs by the South Sudanese side

#### (17) Counterpart personnel input by South Sudanese side.

Numbers	□ Appropriate	□Almost appropriate	☐ Something to be improved
Matching of their specialty with the assignment	□ Appropriate	□Almost appropriate	□ Something to be improved
Basic capacity for assimilating technical transfer	□Appropriate	□Almost appropriate	□ Something to be improved
Time of allocation	□ Appropriate	□Almost appropriate	☐ Something to be improved
Period of allocation	□ Appropriate	□Almost appropriate	☐ Something to be improved
Communication skill (including language)	□ Appropriate	□Almost appropriate	☐ Something to be improved

If you have any recommendation for the improvement, please write it specifically.

# (18) Facilities such as lands, buildings and equipment on the Project site input by the South Sudanese government

Capacity	□ Appropriate	□Almost appropriate	☐ Something to be improved
Function	□ Appropriate	□Almost appropriate	☐ Something to be improved
Time of provision	□ Appropriate	□Almost appropriate	☐ Something to be improved

If you have any recommendation for the improvement, please write it specifically.

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#### (19) Budget for the Project disbursed by South Sudanese government

Amount	□ Appropriate	□Almost appropriate	□ Something to be improved
Time of disbursement	□ Appropriate	□Almost appropriate	☐ Something to be improved

If you have any recommendation for the improvement, please write it specifically.

#### [D-3] Function to assist the Project

- (20) Has the Joint Coordination Committee functioned enough to assist efficient implementation of the Project?
  - a) 🗆 Yes
  - b) No
  - c) 

    I do not have enough knowledge on this subject

If you answered "No", please describe your recommendation for the improvement.

(21) (To be asked to the JICA experts only). in Japan functioned enough to assist efficient	** 0
(22) Has the assistance for the Project by JIC.	A South Sudan Office been enough?
b) □ No c) □ I do not have enough knowledge on thi	is subject
If you answered "No", please describe your red	commendation for the improvement.

F. Impact
(23) Are there or to be expected any positive or negative impact produced by the
Project implementation, such as effect?
a)   Positive impact exist (expected)
b)   By Negative impact exist (expected)
c) $\square$ I do not have enough knowledge on this subject
If you answered a) or b), please describe the reason specifically in the following square.
(24) Is there any effect to the process from "Project purpose" to "Overall goal" by the
important assumptions ((a) The budget for developing river ports is secured. (b) Port
development policy does not change drastically.)
a) 🗆 No problem
b) □ Partial problem is exist
c) $\square$ The Project was disturbed because the important assumptions are not secured
If you answered b) or c), please describe the reason specifically in the following square.
(25) How do you expect the effect to your organization when the Overall goal (Inland
water transport in South Sudan is facilitated and its capacity enhanced.) will be
accomplished? Describe your comments on this subject.

G. Sustainability
[Sustainability in the organizational aspect]
(26) Has there been any change on legal and institutional framework that justifies vital
existence of JRPA?
a) □ Yes
b) □ No
c) $\square$ I do not have enough knowledge on this subject
If you answered "Yes", please describe your recommendation for the improvement.
[Sustainability in the technical aspect]
(27) Even after the Project ends, will the staff in JRPA be able to continue to perform
the skills and knowledge obtained in the Project on their task as staff?
a) 🗆 Yes
b) □ No
c) $\square$ I do not have enough knowledge on this subject
If you answered "No", please describe your recommendation for the improvement.
(28) Has the hand-off of equipment provided by the Project been made to the C/P in
order to use such equipment properly?
a)   Yes it has, or it is sure to be transferred by the end of the Project
b) □ No
c) $\Box$ I do not have enough knowledge on this subject
If you answered "No" or "I do not have enough knowledge on this subject", please
describe your recommendation for the improvement.
[Sustainability in the aspect in the human resources]
(29) Even during and after the Project ends, will it be possible for JRPA to allocate
appropriate staffs in the same quality?
a) 🗆 Yes
b) □ No

c) $\square$ I do not have enough knowledge on this subject
If you answered "No", please describe your recommendation for the improvement.
[Sustainability in the financial aspect]
(30) In view of the past budget disbursement for JRPA, will enough budget be disbursed
during and after the Project ends?
a) □ Yes
b) □ No
c) $\Box$ I do not have enough knowledge on this subject
If you answered "No", please describe your recommendation for the improvement.
(31) Please comment any other element that accelerates or interrupts sustainability of
effect of the Project, if you have.
(32) Others
Based on the past implementation of the Project and the former Project, please
recommend us anything useful for the improvement of the JICA's Project in South
Sudan or of similar Japanese technical cooperation schemes in the field of port sector.
(Request of related documents/information)
Please kindly provide the following documents/information in order to examine the
achievement and others of the Project during the terminal evaluation study. The
following list was selected from the Means of Verification of PDM, therefore if they are
not available, we may confirm by interview in Juba. It is necessary the summary level

01) Volume of cargo handled at each port in South Sudan

which is valuable to grasp the present situation but in detail.

- 02) Operation records of each section of JRPA
- 03) Draft of the regulatory documents

- 04) Port management and operation records
- 05) Budgetary request document
- 06) Draft of port tariff and leasing rules
- 07) Facility Inspection manuals
- 08) Ledger of port facilities
- 09) Monitoring record of depth of berths at Juba port
- 10) Cargo handling manuals for Juba port
- 11) Berth allocation system
- 12) Rule for cargo handling services
- 13) Rules regulating port service providers
- 14) Port security plan and trainings and exercises implementation records
- 15) Fire-fighting plan and fire-fighting exercise records
- 16) Crisis management plan including oil spill disaster
- 17) Exercise against oil spill disaster records
- 18) Manuals to collect port statistics and data
- 19) Port statistics and data
- 20) Brief port statistics report
- 21) Traffic density on each transport mode
- 22) Yearly tendency of budget of C/P organization around five (5) years
- 23) C/P allocation and fixation data during the Project period

Thank you very much for your cooperation.

