

スリランカ国  
肥料利用適正化計画プロジェクト  
終了時評価調査報告書

平成 21 年 7 月  
(2009 年)

独立行政法人国際協力機構  
スリランカ事務所

## 目 次

	Page
・ 終了時評価表	: 1
・ 終了時評価表【農家等インタビュー問番号付き版】	: 7
調査結果	
・ Project Design Matrix (PDM)	: 15
・ PDM指標調査結果	: 16
・ 評価グリッド（実績と実施プロセス）及び調査結果概要	: 17
・ 評価グリッド（評価5項目）及び調査結果概要	: 18
調査資料	
NFS, RRD I, ナショナルコーディネーターへの質問票調査	
・ 質問票	: 21
・ NFS回答	: 24
・ RRD I回答	: 27
・ ナショナルコーディネーター回答	: 30
農家、農業普及員、農業事務所等へのインタビュー調査	
・ インタビュー質問票	: 34
・ 結果概要とりまとめ表	: 42
・ 質問票以外の主な発言内容	: 49
・ 農業事務所責任者等個別聞き取り結果	: 50
・ 各地区調査結果	: 53
・ 各地区調査資料	: 170
調査依頼レター	
出席者名簿	
調査結果（オリジナル）	
・ 農家、農業普及員等インタビュー調査実施状況写真	: 262
・ 文献等調査（妥当性関係）	: 267
・ Record of Discussions (RD)	: 271
・ 主要関係者連絡先	: 289
・ IPNS 終了時評価説明資料	: 291
・ プロジェクト活動レポート (Draft)	: 305

終了時評価表

1. 案件の概要	
国名：スリランカ	案件名：肥料利用適正化計画プロジェクト
分野：農業	援助形態：技術協力プロジェクト
所轄部署：スリランカ事務所	協力金額（評価時点）：14 百万円
協力 期間	2006 年 8 月 22 日 ～2009 年 3 月 31 日
	先方関係機関：農業開発・農民サービス省 国家肥料局他
	日本側協力機関：特に無し
	他の関連協力：稲作技術・普及技術関連の 本邦研修等

1-1 協力の背景と概要

スリランカの農家は大多数が小規模であり、その多くが貧困層に位置づけられる。農業生産においては、肥料、農薬、種子の投入コストが増大しているものの、単収は伸び悩み、農業収入は低迷している。農業生産の課題の1つとして、肥料の投入が適切に行われていないことによる地力低下が挙げられる。化学肥料に高率の政府補助金が与えられていることから、肥料投入が著しく化学肥料に依存し、特に、尿素過多になっている。このため、肥料の利用効率が悪く、地中の微量元素の枯渇を招く結果となっている。また、アンバランスな化学肥料利用は生産コスト増の要因ともなっている。一部地域においては、尿素的の過剰投入によると見られる地下水の窒素過多で井戸水が飲用不適となるなど、環境汚染を引き起こしている。肥料利用を効率的に行うことは、地力向上による単収の改善だけでなく化学肥料の利用量の減少につながり、また家畜糞尿等安価な有機肥料の利用増加により、生産コストを軽減させ農業所得向上に資するものである。有機肥料を含めた、肥料の効率的利用については、FAO が「Integrated Plant Nutrition System (IPNS)」を提唱し、各国で普及を進めているところである。スリランカにおいても、ESCAP (Economic and Social Commission for Asia and Pacific: アジア太平洋経済社会委員会) の協力により、2000 年から 2001 年にかけて中央政府農業普及担当職員への研修が実施され、また、スリランカ政府独自の施策として、農業局肥料部が農民等への研修を実施しているところであるが、農民に広く浸透させるためには、地域レベルでの普及活動の促進が強く求められていた。このため、本プロジェクトは小規模農家の多い稲作地帯を中心に、農家及び農業普及員等に対して IPNS の研修等を行い、適正な肥料利用の促進を図るものである。なお、リソースパーソンには、稲作技術及び普及技術に関する本邦研修の帰国研修員が含まれていることから、帰国後の本邦研修効果の周囲への波及という観点からも効果的な協力である。

1-2 協力内容

(1) 上位目標

農村地域における貧困削減に貢献する。

## (2) プロジェクト目標

稲作農家の間で適正な肥料利用方法が定着する。

## (3) 成果

1. 農業事務所における普及担当職員の適正な肥料利用方法についての技術・知識が向上する。
2. 研修を受けた稲作農家の適正な肥料利用方法についての技術・知識が向上する。

## (4) 投入

日本側：研修用資機材、研修教材、研修諸費等

スリランカ側：リソースパーソン、研修施設等

## 2. 実績と実施プロセス

### (1) 実績

実績については、本プロジェクトの主要な活動コンポーネント(土壌サンプル採取、土壌分析、Soil Test Kit 配布、研修、マニュアル(シンハラ語)作成等)は計画の4県(クルネガラ、ポロンナルワ、ハンバントタ、アヌラダプラ)の6農業事務所等に於いてそれぞれ一通り実施されて一定の成果を得ているが、特に活動量の面から見ると、例えばSoil Test Kit は613セット(同計画数600)が準備・配布され計画を達成しているが、一方、研修参加者数(例えばクルネガラでは延2,676人(同計画数6,000))等は計画に達していない。(詳細はプロジェクト活動レポート等参照)

### (2) 実施プロセス

実施プロセスについては、本プロジェクトでは、各作期の前に各事務所の活動計画を作成し、予算、資材等投入要請を前作期の結果概要報告とともにJICAへ提出することとしていた。しかし、この要請及び報告の提出が各期遅れたことから、現場の農作業の進捗に対して投入実施のタイミングが遅くなった。現場の農業事務所、農業普及員、農家からも投入の遅れは今回の一番の問題点として指摘されており、この遅れにより本来プロジェクトで利用可能な予算を完全に活用することができず、すなわち投入量の減少と活動量の減少に繋がった。

また、計画段階に於いて農業開発・農民サービス省、JICA事務所等による精査が十分でなく、RDに記載の無い「Workshop」がPDMの実績指標とされているなど計画に一部不整合があり、これは最後まで修正されなかった。実施段階に於いても農家の評価テストが実施されていない地区があるなどPDMに沿った事業運営が一部なされなかったと見受けられる。これらのことは事業の円滑な運営を困難にしたと考えられ、更に、プロジェクト活動レポートの整理についても(終了時評価時点で)不十分な部分があると言わざるを得ない。

この実施段階に於ける原因としては、本プロジェクトが採用した実施プロセスでは、スリランカ側の技術面でのリソースパーソンが、本人の別業務も行いながら本事業のマネジメントも担当していたことから、3年間で広域の4県6農業事務所での

研修等を実施するために必要な多くの事務量を処理するのに想定以上の時間がかかったこと、また、いくつかの現場事務所では所長等が人事異動しその際の引き継ぎが十分でなかったこと等が考えられる。

これらの問題点の一部はプロジェクトのマネジメントの問題として2年目には把握されており、JICA とスリランカ関係者間で協議し、2年目末までに、マネジメントに於ける農業開発・農民サービス省国家肥料局の直接の関与を増やすなど一定の改善を試みた。それでも、新しいマネジメント体制によって問題点が完全に解決したとは言い難いが、短期のプロジェクト期間中に関係者の協力のもと改善を図ったことは評価されて良いことと考えられる。

### 3. 5項目ごとの評価

(注) 本終了時評価での農家、農業普及員の意見等は、本プロジェクトを実施した4県の6農業事務所において、プロジェクトに参加した農家、農業普及員の中から無作為に選定して調査協力を得た農家計57名、農業普及員計47名等を対象に、インタビュー調査を行って得た。また、他のプロジェクト関係者の意見等は質問票等により把握した。

#### (1) 妥当性

以下のことから、本プロジェクトはスリランカの政策、プロジェクト対象者のニーズ、及び、我が国の援助政策に内容、時期ともに合致しており、妥当性はある程度高かった。

本プロジェクトは、スリランカの化学肥料に偏った施肥状況等を背景に、2006年8月から、有機肥料の利用拡大等による肥料利用の適正化を通じた貧困削減を図るため、地域レベルのIPNS研修の実施等を中心に開始された。本プロジェクト開始後の2007年9月3日に策定された新しい国家農業計画(National Agricultural Policy for Food and Export Agriculture Crops and Floriculture)においても、IPNSを通じた有機肥料の利用拡大等と化学肥料の削減が施策目標として挙げられており、また、同じく2007年9月3日に開始された”Let us cultivate and uplift the Nation”運動においても、IPNSに基づく持続的農業開発と2010年までの化学肥料の25%削減という目標が掲げられている。これら化学肥料やIPNS等については地元紙においても、重要な課題としてしばしば取り上げられている。

一方で、化学肥料に対する政府の高率補助施策が継続されていることは、農家の化学肥料削減インセンティブを妨げていた。本施策の背景には農家からの強い要望があることから、IPNS等による肥料利用の適正化への農家等の理解が深まらないと高率補助施策を背景にした化学肥料の過剰利用からの転換が難しいという側面もある。

研修対象者は、貧困対策を念頭に、米どころの小規模農家、農業普及員等が選定され、それぞれがIPNSに対して高い関心を示している。IPNSの更なる普及のために研修対象者数の拡大を求める意見もあった。

我が国の援助政策との整合性の観点からは、国別援助計画の「中・長期開発ビジョンに沿った援助計画」の「(c) 貧困対策に対する支援」に合致している。JICA 国別事業実施計画においても、「農漁村・地方開発」の中で、スリランカの貧困層は、主に農漁村部等を中心に分布しており、貧困層の経済基盤である農水産業の生産性の向上等が重要な課題であり、農業については、低い農業生産性、農家の営農技術不足等が課題であるとされており、本プロジェクトはこれらに整合している。

## (2) 有効性

以下のように、PDMに示されたプロジェクト目標達成の指標である、IPNS 適用割合、米生産コスト、有機肥料・化学肥料の利用量、営農パターンの変化の4項目の指標について見ると、米生産コストの削減や化学肥料利用量の削減は十分ではないものの、この3年という短期間にそれぞれの指標について一定の成果を得ていることから、有効性はある程度高かったと考えられる。

IPNS 適用割合については、調査を行った農家のうち86%が適用したと回答している。なお、適用していない農家は最終年度にプロジェクト対象であったアヌラダプラ県の農家であり、時間的な制約の要因が大きかったと考えられる。

米の生産コストについては、有機肥料の調達経費等で上がったとしているのが農家の56%、農業普及員の30%、化学肥料の使用量減等で下がったとしているのが農家の37%、農業普及員の17%となっている。有機肥料の利用増から輸送等調達費用が嵩み、一方で、化学肥料等の利用削減がまだ広まっていないため、コスト削減というIPNS効果の実感が限定的なものになっている。それでも1/3以上の農家がコストが下がったと回答していることは成果の表れといえる。

有機肥料・化学肥料の利用量については、IPNSの実施により全般に有機肥料の利用が増えたとの回答がされている。有機肥料利用の内容は、堆肥、稲藁、籾殻燻炭、緑肥、牛糞等多岐に渡る。一方で、化学肥料が安く入手できること、化学肥料の削減にまだ十分な自信は得ていないと見られることから、化学肥料の使用量を削減した農家は一部に止まっているものの、尿素肥料を10%~25%削減した農家も出てきており、このことはIPNSの効果への理解が広まって来たことの表れと考えられる。

営農パターンの変化については、IPNSの実践等による有機肥料の利用の増加、深耕、水管理の改善等、農家、農業普及員のそれぞれ100%が、営農パターンが変化したと回答している。

## (3) 効率性

以下のことから、効率性は十分に確保されたとは言えないと考えられる。

活動については、主要な活動コンポーネントは全地区に於いて一通り実施され、研修の質も確保されているが、研修参加者数等活動量を見ると計画に達していない。また、投入（研修用資機材、研修諸費）については、前述のように、各作期毎のJICAからの投入実施の前提とした、前作期の結果概要報告及び次作期の投入要請のJICAへの

提出が遅れたことから、現場の農作業の進捗に対して投入実施のタイミングが遅くなり、このことが投入量の減少、活動量の減少にも繋がった。

一方で、研修の質は農家の100%、農業普及員の70%が分かり易かったと評価しており、特に、農家の42%が本プロジェクト参加前にはIPNSについて何も知らなかったとしている中で、プロジェクト参加後は農業普及員とともに100%の農家がIPNSの知識と技術を会得し、自信と能力を持ったと答えていることは、特筆すべき成果と考えられる。

供与したSoil Test Kit資材は全て使用済みであり、籾殻燻炭製造器は現在も農家で管理され農家間で交代で使用され、IPNSの普及継続に貢献している。

なお、全ての投入はスリランカ国内で調達されたことからコスト面では効率的であった。投入の種類については、微量要素の市場での調達が困難であったこと（これは今後の波及を図る上での課題でもある）以外は、特段の問題は見られなかった。スリランカ側の投入としての研修施設は、農業事務所の会議室等農家に近いところに確保され比較的効率的であったが、それでも、農家等の研修場所等へのアクセスの確保は今後の同様な活動の実施にあたっての課題である。

#### （4）インパクト

以下のことから、上位目標達成に向けたインパクトは見込まれると考えられる。

農家の89%、農業普及員の72%がIPNSによって米の収量が増加（10～50ブッシェル/エーカー）したと実感していることは非常に重要な結果である。IPNSによる有機肥料利用拡大と化学肥料削減によるコスト削減が進むためには、農家がIPNSのメリットを実感することが前提であるが、本プロジェクトによる米の単収増は農家がそれを実感できたことを示している。このことから、有機肥料の安定供給を図る等の必要な支援を更に進めることにより、米の生産でのコスト削減・利益マージンの拡大すなわち、上位目標である「農村地域における貧困削減に貢献」の達成は見込まれるものと考えられる。

また、その他のインパクトとして、農家から、米の品質が向上した、虫害が減少した等の収入増に繋がる重要な正のインパクトが挙げられているが、一方で、有機肥料用に干し草をストックすることにより鼠が増加したとの報告があり、今後、IPNSの普及を進めるにあたって注意を払う必要がある。

#### （5）自立発展性

以下のことから、IPNS等による肥料利用適正化の取り組みの面的波及の見通しは十分ではないものの、一定の自立発展性は見込めるものと考えられる。

技術面に関しては、本プロジェクトにより、農家を日常直接指導する農業普及員等はプロジェクト後も継続してIPNSの指導を行うに必要な知識・技術を取得したとしており、今プロジェクトの主要な技術リソースであったスリランカ米開発研究所も、今後とも技術的な指導は可能としている。更に、農家の88%、農業普及員の100%が本

プロジェクトで得た IPNS に係る知識・技術を他の農家等に伝えるとしている。

政策面に関しては、全国で進められている“Let us cultivate and uplift the Nation”運動等により有機肥料の調達支援等に係る予算が十分ではないものの当面確保されている。しかし、IPNS 等の技術を今回のプロジェクト対象外の地区、県へ普及・拡大するための仕組みの整備はこれからであると言わざるを得ない。

また、一部の農家は、有機肥料の調達のための労働時間すなわちコストの増加を指摘しており、これは阻害要因になりうるものとして今後の IPNS 等の普及方法を考える上で重要である。

政府による化学肥料に対する高率補助は継続しており、このため化学肥料の削減と有機肥料の利用拡大によるコスト削減という IPNS の効果を農家が実感しにくくなっている状況であるが、しかし、初めの2年間に本プロジェクトを実施したクルネガラ、ポロンナルワ両県を見ると、それぞれの農家の100%がプロジェクト対象期間後も、現時点ではコスト増をもたらす可能性のある有機肥料の利用等 IPNS を継続しており、このことは既に自立的な発展性が一部発現していると思なされる。

これらのことから、制度的な支援が十分ではない、前述のように、微量要素の入手が困難である等の課題はあるが、技術面は一定の確立が得られていること、本プロジェクト等により、多くの農家が有機肥料の利用等 IPNS による収量増加を実感できるということが確認されたこと、更に、一部の農家は既に化学肥料の削減に取り組んでいること等は、自立発展性が見込める要因と考えられる。

#### 4. 提言と教訓

スリランカにおいては、IPNS の普及等による肥料利用の適正化に国として取り組んでいる一方で、化学肥料に対する政府の高率補助も継続されている。化学肥料利用の必要性は認められるものの、高率補助は過度の化学肥料使用をもたらす方向の施策であり、この状況下で肥料利用の適正化を図るためには、本プロジェクトのような技術支援に加えて、化学肥料削減方向に農家にインセンティブを与えるような施策、例えば農家の化学肥料削減努力に対する直接支払や化学肥料を削減した農産物を評価するマーケットの育成等の必要性が提言として挙げられる。

また、本プロジェクトのように短期間に多くの活動を行う必要がある事業（多くの農家に IPNS 技術を伝え、農家の信頼を得る必要）においては特に、より良いマネジメントの確保が重要である。そのため、例えばリソースパーソンとは別にプロジェクトをフルタイムでマネジメントするスリランカの者を配置すること等、プロジェクトの有効性、効率性をより上げるためのマネジメント方策が必要であることが、本プロジェクトからの教訓として挙げられる。

#### 5. 添付書類

- ・ 終了時評価調査資料 一式
- ・ プロジェクト活動レポート



終了時評価表【農家等インタビュー問番号付き版】

1. 案件の概要	
国名：スリランカ	案件名：肥料利用適正化計画プロジェクト
分野：農業	援助形態：技術協力プロジェクト
所轄部署：スリランカ事務所	協力金額（評価時点）：14百万円
協力 期間	2006年8月22日 ～2009年3月31日
	先方関係機関：農業開発・農民サービス省 国家肥料局他
	日本側協力機関：特に無し
	他の関連協力：稲作技術・普及技術関連の 本邦研修等
1-1 協力の背景と概要	
<p>スリランカの農家は大多数が小規模であり、その多くが貧困層に位置づけられる。農業生産においては、肥料、農薬、種子の投入コストが増大しているものの、単収は伸び悩み、農業収入は低迷している。農業生産の課題の1つとして、肥料の投入が適切に行われていないことによる地力低下が挙げられる。化学肥料に高率の政府補助金が与えられていることから、肥料投入が著しく化学肥料に依存し、特に、尿素過多になっている。このため、肥料の利用効率が悪く、地中の微量要素の枯渇を招く結果となっている。また、アンバランスな化学肥料利用は生産コスト増の要因ともなっている。一部地域においては、尿素的の過剰投入によると見られる地下水の窒素過多で井戸水が飲用不適となるなど、環境汚染を引き起こしている。肥料利用を効率的に行うことは、地力向上による単収の改善だけでなく化学肥料の利用量の減少につながり、また家畜糞尿等安価な有機肥料の利用増加により、生産コストを軽減させ農業所得向上に資するものである。有機肥料を含めた、肥料の効率的利用については、FAO が「Integrated Plant Nutrition System (IPNS)」を提唱し、各国で普及を進めているところである。スリランカにおいても、ESCAP (Economic and Social Commission for Asia and Pacific: アジア太平洋経済社会委員会) の協力により、2000年から2001年にかけて中央政府農業普及担当職員への研修が実施され、また、スリランカ政府独自の施策として、農業局肥料部が農民等への研修を実施しているところであるが、農民に広く浸透させるためには、地域レベルでの普及活動の促進が強く求められていた。このため、本プロジェクトは小規模農家の多い稲作地帯を中心に、農家及び農業普及員等に対して IPNS の研修等を行い、適正な肥料利用の促進を図るものである。なお、リソースパーソンには、稲作技術及び普及技術に関する本邦研修の帰国研修員が含まれていることから、帰国後の本邦研修効果の周囲への波及という観点からも効果的な協力である。</p>	
1-2 協力内容	
(1) 上位目標	
農村地域における貧困削減に貢献する。	

## (2) プロジェクト目標

稲作農家の間で適正な肥料利用方法が定着する。

## (3) 成果

1. 農業事務所における普及担当職員の適正な肥料利用方法についての技術・知識が向上する。
2. 研修を受けた稲作農家の適正な肥料利用方法についての技術・知識が向上する。

## (4) 投入

日本側：研修用資機材、研修教材、研修諸費等  
スリランカ側：リソースパーソン、研修施設等

## 2. 実績と実施プロセス

### (1) 実績

実績については、本プロジェクトの主要な活動コンポーネント(土壌サンプル採取、土壌分析、Soil Test Kit 配布、研修、マニュアル(シンハラ語)作成等)は計画の4県(クルネガラ、ポロンナルワ、ハンバントタ、アヌラダプラ)の6農業事務所等に於いてそれぞれ一通り実施されて一定の成果を得ているが、特に活動量の面から見ると、例えばSoil Test Kit は613セット(同計画数600)が準備・配布され計画を達成しているが、一方、研修参加者数(例えばクルネガラでは延2,676人(同計画数6,000))等は計画に達していない。(詳細はプロジェクト活動レポート等参照)

### (2) 実施プロセス

実施プロセスについては、本プロジェクトでは、各作期の前に各事務所の活動計画を作成し、予算、資材等投入要請を前作期の結果概要報告とともにJICAへ提出することとしていた。しかし、この要請及び報告の提出が各期遅れたことから、現場の農作業の進捗に対して投入実施のタイミングが遅くなった。現場の農業事務所、農業普及員、農家からも投入の遅れは今回の一番の問題点として指摘されており、この遅れにより本来プロジェクトで利用可能な予算を完全に活用することができず、すなわち投入量の減少と活動量の減少に繋がった。

また、計画段階に於いて農業開発・農民サービス省、JICA事務所等による精査が十分でなく、RDに記載の無い「Workshop」がPDMの実績指標とされているなど計画に一部不整合があり、これは最後まで修正されなかった。実施段階に於いても農家の評価テストが実施されていない地区があるなどPDMに沿った事業運営が一部なされなかったと見受けられる。これらのことは事業の円滑な運営を困難にしたと考えられ、更に、プロジェクト活動レポートの整理についても(終了時評価時点で)不十分な部分があると言わざるを得ない。

この実施段階に於ける原因としては、本プロジェクトが採用した実施プロセスでは、スリランカ側の技術面でのリソースパーソンが、本人の別業務も行いながら本事業のマネージメントも担当していたことから、3年間で広域の4県6農業事務所での

研修等を実施するために必要な多くの事務量を処理するのに想定以上の時間がかかったこと、また、いくつかの現場事務所では所長等が人事異動しその際の引き継ぎが十分でなかったこと等が考えられる。

これらの問題点の一部はプロジェクトのマネージメントの問題として2年目には把握されており、JICA とスリランカ関係者間で協議し、2年目末までに、マネージメントに於ける農業開発・農民サービス省国家肥料局の直接の関与を増やすなど一定の改善を試みた。それでも、新しいマネージメント体制によって問題点が完全に解決したとは言い難いが、短期のプロジェクト期間中に関係者の協力のもと改善を図ったことは評価されて良いことと考えられる。

### 3. 5項目ごとの評価

(注) 本終了時評価での農家、農業普及員の意見等は、本プロジェクトを実施した4県の6農業事務所において、プロジェクトに参加した農家、農業普及員の中から無作為に選定して調査協力を得た農家計57名、農業普及員計47名等を対象に、インタビュー調査を行って得た。また、他のプロジェクト関係者の意見等は質問票等により把握した。

#### (1) 妥当性

以下のことから、本プロジェクトはスリランカの政策、プロジェクト対象者のニーズ、及び、我が国の援助政策に内容、時期ともに合致しており、妥当性はある程度高かった。

本プロジェクトは、スリランカの化学肥料に偏った施肥状況等を背景に、2006年8月から、有機肥料の利用拡大等による肥料利用の適正化を通じた貧困削減を図るため、地域レベルのIPNS研修の実施等を中心に開始された。本プロジェクト開始後の2007年9月3日に策定された新しい国家農業計画(National Agricultural Policy for Food and Export Agriculture Crops and Floriculture)においても、IPNSを通じた有機肥料の利用拡大等と化学肥料の削減が施策目標として挙げられており、また、同じく2007年9月3日に開始された”Let us cultivate and uplift the Nation”運動においても、IPNSに基づく持続的農業開発と2010年までの化学肥料の25%削減という目標が掲げられている。これら化学肥料やIPNS等については地元紙においても、重要な課題としてしばしば取り上げられている。

一方で、化学肥料に対する政府の高率補助施策が継続されていることは、農家の化学肥料削減インセンティブを妨げていた。本施策の背景には農家からの強い要望があることから、IPNS等による肥料利用の適正化への農家等の理解が深まらなると高率補助施策を背景にした化学肥料の過剰利用からの転換が難しいという側面もある。

研修対象者は、貧困対策を念頭に、米どころの小規模農家、農業普及員等が選定され、それぞれがIPNSに対して高い関心(Q231-100%)を示している。IPNSの更なる普及のために研修対象者数の拡大を求める意見もあった。

我が国の援助政策との整合性の観点からは、国別援助計画の「中・長期開発ビジョンに沿った援助計画」の「(c) 貧困対策に対する支援」に合致している。JICA 国別事業実施計画においても、「農漁村・地方開発」の中で、スリランカの貧困層は、主に農漁村部等を中心に分布しており、貧困層の経済基盤である農水産業の生産性の向上等が重要な課題であり、農業については、低い農業生産性、農家の営農技術不足等が課題であるとされており、本プロジェクトはこれらに整合している。

## (2) 有効性

以下のように、PDMに示されたプロジェクト目標達成の指標である、IPNS 適用割合、米生産コスト、有機肥料・化学肥料の利用量、営農パターンの変化の4項目の指標について見ると、米生産コストの削減や化学肥料利用量の削減は十分ではないものの、この3年という短期間にそれぞれの指標について一定の成果を得ていることから、有効性はある程度高かったと考えられる。

IPNS 適用割合については、調査を行った農家のうち86%(Q122-49/57)が適用したと回答している。なお、適用していない農家は最終年度にプロジェクト対象であったアヌラダプラ県の農家であり、時間的な制約の要因が大きかったと考えられる。

米の生産コストについては、有機肥料の調達経費等で上がったとしているのが農家の56%(Q132-32/57)、農業普及員の30%(Q132-14/47)、化学肥料の使用量減等で下がったとしているのが農家の37%(Q132-21/57)、農業普及員の17%(Q132-8/47)となっている。有機肥料の利用増から輸送等調達費用が嵩み、一方で、化学肥料等の利用削減がまだ広まっていないため、コスト削減というIPNS効果の実感が限定的なものになっている。それでも1/3以上の農家がコストが下がったと回答していることは成果の表れといえる。

有機肥料・化学肥料の利用量については、IPNSの実施により全般に有機肥料の利用が増えたとの回答がされている。有機肥料利用の内容は、堆肥、稲藁、籾殻燻炭、緑肥、牛糞等多岐に渡る。一方で、化学肥料が安く入手できること、化学肥料の削減にまだ十分な自信は得ていないと見られることから、化学肥料の使用量を削減した農家は一部に止まっているものの、尿素肥料を10%~25%削減した農家も出てきており、このことはIPNSの効果への理解が広まって来たことの表れと考えられる。

営農パターンの変化については、IPNSの実践等による有機肥料の利用の増加、深耕、水管理の改善等、農家、農業普及員のそれぞれ100%(Q161-57/57, 47/47)が、営農パターンが変化したと回答している。

## (3) 効率性

以下のことから、効率性は十分に確保されたとは言えないと考えられる。活動については、主要な活動コンポーネントは全地区に於いて一通り実施され、研修の質も確保されている(Q221)が、研修参加者数等活動量を見ると計画に達していない。また、投入(研修用資機材、研修諸費)については、前述のように、各作期毎の

JICA からの投入実施の前提とした、前作期の結果概要報告及び次作期の投入要請の JICA への提出が遅れたことから、現場の農作業の進捗に対して投入実施のタイミングが遅くなり、このことが投入量の減少、活動量の減少にも繋がった。

一方で、研修の質は農家の 100% (Q221-57/57)、農業普及員の 70% (Q221-33/47) が分かり易かったと評価しており、特に、農家の 42% (Q111-24/57) が本プロジェクト参加前には IPNS について何も知らなかったとしている中で、プロジェクト参加後は農業普及員とともに 100% (Q112, Q113-57/57) の農家が IPNS の知識と技術を会得し、自信と能力を持ったと答えていることは、特筆すべき成果と考えられる。

供与した Soil Test Kit 資材は全て使用済みであり、籾殻燻炭製造器は現在も農家で管理され農家間で交代で使用され、IPNS の普及継続に貢献している。

なお、全ての投入はスリランカ国内で調達されたことからコスト面では効率的であった。投入の種類については、微量要素の市場での調達が困難であったこと（これは今後の波及を図る上での課題でもある）以外は、特段の問題は見られなかった。スリランカ側の投入としての研修施設は、農業事務所の会議室等農家に近いところに確保され比較的効率的であったが、それでも、農家等の研修場所等へのアクセスの確保は今後の同様な活動の実施にあたっての課題である。

#### (4) インパクト

以下のことから、上位目標達成に向けたインパクトは見込まれると考えられる。

農家の 89% (Q141-51/57)、農業普及員の 72% (Q141-34/47) が IPNS によって米の収量が増加（10～50 ブッシェル／エーカー）したと実感していることは非常に重要な結果である。IPNS による有機肥料利用拡大と化学肥料削減によるコスト削減が進むためには、農家が IPNS のメリットを実感することが前提であるが、本プロジェクトによる米の単収増は農家がそれを実感できたことを示している。このことから、有機肥料の安定供給を図る等の必要な支援を更に進めることにより、米の生産でのコスト削減・利益マージンの拡大すなわち、上位目標である「農村地域における貧困削減に貢献」の達成は見込まれるものと考えられる。

また、その他のインパクトとして、農家から、米の品質が向上した、虫害が減少した等の収入増に繋がる重要な正のインパクトが挙げられているが、一方で、有機肥料用に干し草をストックすることにより鼠が増加したとの報告があり、今後、IPNS の普及を進めるにあたって注意を払う必要がある。

#### (5) 自立発展性

以下のことから、IPNS 等による肥料利用適正化の取り組みの面的波及の見通しは十分ではないものの、一定の自立発展性は見込めるものと考えられる。

技術面に関しては、本プロジェクトにより、農家を日常直接指導する農業普及員等はプロジェクト後も継続して IPNS の指導を行うに必要な知識・技術を取得したとしており、今プロジェクトの主要な技術リソースであったスリランカ米開発研究所も、

今後とも技術的な指導は可能としている。更に、農家の 88% (Q114-50/57)、農業普及員の 100% (Q114-47/47) が本プロジェクトで得た IPNS に係る知識・技術を他の農家等に伝えるとしている。

政策面に関しては、全国で進められている “Let us cultivate and uplift the Nation” 運動等により有機肥料の調達支援等に係る予算が十分ではないものの当面確保されている。しかし、IPNS 等の技術を今回のプロジェクト対象外の地区、県へ普及・拡大するための仕組みの整備はこれからであると言わざるを得ない。

また、一部の農家は、有機肥料の調達のための労働時間すなわちコストの増加を指摘しており、これは阻害要因になりうるものとして今後の IPNS 等の普及方法を考える上で重要である。

政府による化学肥料に対する高率補助は継続しており、このため化学肥料の削減と有機肥料の利用拡大によるコスト削減という IPNS の効果を農家を実感しにくくなっている状況であるが、しかし、初めの 2 年間に本プロジェクトを実施したクルネガラ、ポロンナルワ両県を見ると、それぞれの農家の 100% (Q121-11/11, 12/12) がプロジェクト対象期間後も、現時点ではコスト増をもたらす可能性のある有機肥料の利用等 IPNS を継続しており、このことは既に自立的な発展性が一部発現していると思なされる。

これらのことから、制度的な支援が十分ではない、前述のように、微量要素の入手が困難である等の課題はあるが、技術面は一定の確立が得られていること、本プロジェクト等により、多くの農家が有機肥料の利用等 IPNS による収量増加を実感できるということが確認されたこと、更に、一部の農家は既に化学肥料の削減に取り組んでいること等は、自立発展性が見込める要因と考えられる。

#### 4. 提言と教訓

スリランカにおいては、IPNS の普及等による肥料利用の適正化に国として取り組んでいる一方で、化学肥料に対する政府の高率補助も継続されている。化学肥料利用の必要性は認められるものの、高率補助は過度の化学肥料使用をもたらす方向の施策であり、この状況下で肥料利用の適正化を図るためには、本プロジェクトのような技術支援に加えて、化学肥料削減方向に農家にインセンティブを与えるような施策、例えば農家の化学肥料削減努力に対する直接支払や化学肥料を削減した農産物を評価するマーケットの育成等の必要性が提言として挙げられる。

また、本プロジェクトのように短期間に多くの活動を行う必要がある事業（多くの農家に IPNS 技術を伝え、農家の信頼を得る必要）においては特に、より良いマネジメントの確保が重要である。そのため、例えばリソースパーソンとは別にプロジェクトをフルタイムでマネジメントするスリランカの者を配置すること等、プロジェクトの有効性、効率性をより上げるためのマネジメント方策が必要であることが、本プロジェクトからの教訓として挙げられる。

5. 添付書類

- 終了時評価調査資料 一式
- プロジェクト活動レポート

## 調査結果



ANNEX IV Project Design Matrix (PDM)

Period: from August 2006 to March 2009

Project Name: Promotion of Integrated Plant Nutrition Practice among Farmers for Sustainable Improvement of Crop Productivity

Target Group: AD, AI, and food crop growers in each target district

Target Area: Kurunegala, Polonnaruwa, Hambantota, Anuradhapura and Alibetlinga Poverty

Narrative summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p><b>[Overall Goal]</b> The Project is to contribute for alleviating poverty in agricultural areas.</p>	<p>Increase of income of food crop growers by reducing cost of production of food crops</p>	<p>Field level monitoring of food crop production</p>	
<p><b>[Project Purpose]</b> The Project is to promote the Integrated Plant Nutrition System (IPNS) among food crop growers in major paddy and other food crop growing districts.</p>	<p>Application rate of new practices Unit cost of production of food crops Usage of the amount of organic and inorganic fertilizer per unit area Changing pattern of farming practices</p>	<p>Monitoring of food crop growers Monitoring of food crop growers Monitoring of food crop growers Monitoring of food crop growers</p>	<p>The price of food crops is not declined suddenly.</p>
<p><b>[Outputs of the Project]</b> 1. Dissemination of knowledge and skill on IPNS of Assistant Directors (AD) and Agriculture Instructors (AI) to the food crop growers will be strengthened and improved.</p>	<p>No. of workshop conducted No. of participants for workshop</p>	<p>Training log book Training log book</p>	
<p>2. The confidence and ability of application of IPNS by food crop growers will be improved and diffused among food crop growers.</p>	<p>No. of training conducted No. of participants for training Score of evaluation test Training Achievement</p>	<p>Training log book Training log book Questionnaire to food crop growers Questionnaire to food crop growers</p>	<p>No break out of devastating diseases No severe drought</p>
<p><b>[Activities]</b> 1-1 Conduct the soil test of the soil samples of food crop growers' field. 1-2 Conduct the training for Research Assistant (RA) on soil test. 1-3 Prepare the illustrative extension brochures to be used for training. 1-4 Conduct the baseline survey on food crop growers. 1-5 Conduct the pilot training for AD and AI on IPNS. 1-6 Monitor and evaluate of trained food crop growers by AD and AI.</p>	<p>(by Japanese side) Equipment and materials for training Teaching materials for training Miscellaneous expenses for training Follow-up assistance for training</p>	<p>Input (by Sri Lankan side) Rental fee of facility for training Travel expenses &amp; lecture fee for internal instructors Miscellaneous expenses (cost share)</p>	<p>AD and AI continuously engaged in their job Trained farmers continuously engaged in farming</p>
<p>2-1 Conduct the food crop growers training including lecture type and practice on IPNS. 2-2 Conduct the field day to demonstrate the advantages of IPNS to the food crop growers after harvesting.</p>			<p>Preconditions Market of food crop growers doesn't collapse Maintenance of peace and order in each target areas will be favorable</p>

*Am*

PDM指標調査結果

項目	Objectively Verifiable Indicators	評価基準値	PDMでの評価手法	実際の評価手法	実際の評価内容	評価結果				備考		
						インタビュー 問番号	YES率 (全地区)					
プロジェクト目的	新しい営農の適用度	設定無し	モニターリング	農家インタビュー調査	IPNS実践農家は？	Q1.2.2	86%					
	米生産費	設定無し	モニターリング	農家インタビュー調査	米生産費下がった農家は？	Q1.3.2	37%					
	有機、非有機肥料使用	設定無し	モニターリング	農家インタビュー調査	有機、非有機肥料の使用量変化あるか？	Q1.5.1	98%					
	営農の変化	設定無し	モニターリング	農家インタビュー調査	営農の変化あるか？	Q1.6.1	100%					
プロジェクトアウトプット	ワークショップ数	設定無し	ログブック	Final Report	Trainer Training数	1	3	1	3	1	5	
	研修数	設定無し	ログブック	Final Report	Trainer Training参加者数	104	135	76	135	76	315	計画数延べ285人
	研修参加者数	設定無し	ログブック	Final Report	Farmer Training数	126	422	140	422	272	960	
	評価試験結果	設定無し	農家への質問票	Final Report	研修後のMarks(研修前を100とする)	no data	245	no data	245	149		
	研修達成度	設定無し	農家への質問票	農家インタビュー調査	研修前にIPNS知識あったか？	インタビュー 問番号	YES率 (全地区)					備考
					研修後、IPNSに自信を持ったか？	Q1.1.1	58%					
						Q1.1.3	100%					42ポイント増

評価グリッド(実績と実施プロセス)及び調査結果概要  
 (In-Country Training on Promotion of Integrated Plan Nutrition System (IPNS) among Farmers for sustainable Improvement of Crop Productivity and Alleviating Poverty)

( )=from budget sheet

		in Schedule (RD)	調査結果概要		Remarks	
Outputs Summary	Materials					
	Training manuals & curricular		Manual in Sinhara 2500 copies produced			
	Activities					
	Training in Kurunegara (99 officers) (1st year)					
		Soil Test (contact farmers)	around 200	171 farmers		(for 100AI)
		Research Assistant (RA) Training	a five day training	26 trainees		
		Brochures Preparation		produced and distributed		(for 30Farmers*100AI)
		Trainer Training (AD,SMS,AI)	99 officers	104 officers		
		Pilot Training (AD,AI,Farmers) [Trial]	90 farmers+officers	no separated data available		30Farmers*3 AI range, AD,AI
		Farmer Training				
		(1st Training)	3000 Farmers	1425 farmers/65 trainings		(30Farmers*100AI*1season)
		(2nd Training)	3000 Farmers	1251 farmers/61 trainings		(30Farmers*100AI*1season)
		(Field day)	(5000 Farmers)	276 farmers/17 field days		(50Farmers*100AI*1season)
	Training in Polonnaruwa (38 officers) & Hambantota (65 officers) (2nd year)					
		Soil Test (contact farmers)	around 200	183 farmers	176 farmers	(for 100AI)
		Research Assistant (RA) Training	a five day training	done in 1st year	done in 1st year	
		Brochures Preparation		distributed	distributed	(for 30Farmers*100AI)
		Trainer Training (AD,SMS,AI)	103 officers	68+67 officers	76 officers	
		Pilot Training (AD,AI,Farmers) [Trial]	90 farmers+officers	no separated data available	no separated data available	30Farmers*3 AI range, AD,AI
		Farmer Training				
		(1st Training)	6000 Farmers	1240 farmers/ 43+135 trainings	1425 farmers/ 44 trainings	(30Farmers*100AI*2seasons)
		(2nd Training)	6000 Farmers	1608 farmers/ 244 trainings	1251+farmers/ 44+52 trainings	(30Farmers*100AI*2seasons)
		(Field day)	(10000 Farmers)	585 farmers/ 23 field days	27+16 field days	(50Farmers*100AI*2seasons)
		monitoring & evaluation of previous year		done by steering committee		
	Training in Anuradhapura (83 officers) (3rd year)					
		Soil Test (contact farmers)	around 200	183 farms		(for 100AI)
		Research Assistant (RA) Training	a five day training	done in 1st year		
		Brochures Preparation		distributed		(for 30Farmers*100AI)
		Trainer Training (AD,SMS,AI)	83 officers	no separated data available		
		Pilot Training (AD,AI,Farmers) [Trial]	90 farmers+officers	no separated data available		30Farmers*3 AI range, AD,AI
		Farmer Training				
		(1st Training)	6000 Farmers	3425+ farmers/86+125 trainings		(30Farmers*100AI*2seasons)
		(2nd Training)	6000 Farmers	1251 farmers/61 trainings		(30Farmers*100AI*2seasons)
		(Field day)	(10000 Farmers)	no separated data available		(50Farmers*100AI*2seasons)
		monitoring & evaluation of previous year		done as Terminal Evaluation		
	Implementation Process	Survey Items - Achievement of Activities - Management & operation of the Overall project - Method of training - Attitude of trainees - Any impediments to implementation process		インタビュー結果等参照		1.NFS,RRD)等へのQuestionnaire 及び 2.Agr. Office, AI, Farmerへのinterview にて調査

評価グリッド(評価5項目)及び調査結果概要

(IPNS Project : In-Country Training on Promotion of Integrated Plan Nutrition System (IPNS) among Farmers for sustainable improvement of Crop Productivity and Alleviating Poverty)

Relevance 妥当性	Evaluation question		判断基準・方法	Data required	Info Resources	Data collection method	調査結果概要
	大項目	小項目					
Project Purposesはスリランカ国家政策に合致しているか 研修対象者の選定は妥当であったか	定性的	肥料に関する政策	1.Agr. Policy Agr Campaign News papers,R/D 2. NFS,RRDI等	1.Document review 2.Questionnaire	政策で化学肥料削減が求められているが、一方で、化学肥料に対する高単補助は化学肥料利用増大の一因とみられる。 研修対象者のニーズは高かった。		
	定性的	研修対象者の意識	1.Agr.Office,Al,Farmer	1.Interview	研修対象者及び地域の拡大を求める意見が多かった。 関連性が認められた。		
日本の援助政策に合致しているか。手段として妥当か	定性的	研修対象者の規模は適切であったか 個別援助計画との関連性はるか	1.Agr. Office,Al,Farmer	1.Interview 1.Document Review	研修対象者及び地域の拡大を求める意見が多かった。 関連性が認められた。		
	定性的	国別事業実施計画との関連性はるか ODAの手段として妥当か?	JICA国別事業実施計画 1. R/D	1.Document Review	国別事業実施計画との関連性はるか ODAの手段として妥当か?		
プロジェクト目的達成指標 研修/講師の質は高いか	定量的 定性的	新しい装置の適用度 米生産費 有機、非有機肥料使用量 営農の変化	1.NFS,RRDI等 2. Al, Farmer	1.Questionnaire 2.Interview	FDM Objectively Verifiable Indicatorsまとめ参照		
	定性的	研修対象者の能力は向上したか 機材はプロジェクトで活用されているか、(一般機材(重、軽トラ等)及び消耗品以外)当該事業以外に貢献したものはるか	1.NFS,RRDI等 2.Agr. Office,Al,Farmer	1.Questionnaire 2.Interview	研修参加者の評価は高かった。 IPNSに係る知識の向上が認められた。		
Effectiveness 有効性	定性的	Project Purposeの達成に貢献しているか	1.NFS,RRDI等 2.Agr. Office, Al, Farmer	1.Questionnaire 2.Interview	利用及び管理されていた。 クラナリ・プログラム(肥料関係)などが有機肥料利用拡大を促している。		
	定性的	Project Purpose達成を阻害した要因はあるか	1.NFS,RRDI等 2.Agr. office, Al, Farmer	1.Questionnaire 2.Interview	下記の実施体制上の問題以外は特設なし。		
Efficiency 効率性	定量的 定性的	ワークシヨップ数 研修数 研修参加者数 研修実施結果 研修達成度	1.NFS,RRDI等 2.Agr. Office,Al	1.Document review 2.Interview	FDM Objectively Verifiable Indicatorsまとめ参照		
	定性的	投入の種類、量、タイムインは適切であったか 実施体制、密度は十分であったか 研修の施設は適切か コストは妥当か 効果性を阻害した要因はあるか	1.NFS,RRDI等 2. Agr. Office, Al, Farmer 1.NFS,RRDI等 2. Agr. Office, Al, Farmer 1.Agr. Office,Al,Farmer 1.NFS,RRDI等 2.Agr. Office,Al,Farmer	1.Questionnaire 2.Interview 1.Questionnaire 2.Interview 1.Questionnaire 2.Interview 1.Questionnaire 2.Interview	前期の評価、次期の予算要求が適切な時期に出てこなかったため、投入のタイムインが遅れた。量、種類の問題は特になし。 上記のような問題等から、計画を下回った活動があり、実施体制、密度は十分ではなかった。 農家に近いところで研修を実施しており適切であるが、それでも農家の研修参加へのアクセス確保は今後の課題。 実施体制、運営上の問題以外は特設なし。		
Impact インパクト	定性的	Overall Goalの達成は見込まれるか 他のインパクト(正/負)はあるか	1.NFS,RRDI等 2.Agr. Office,Al,Farmer	1.Questionnaire 2.Interview	収量の増加が報告された。 正のインパクトとして、品質の向上が、負のインパクトとして、臭の増加が報告された。 クルナガラ・ボロナナルプでプロジェクト終了後のIPNSの観察が報告された。		
	定性的	Project終了地域でIPNSが進められているか IPNSの良い事例の数は Project終了後、IPNS継続のための支援は IPNS実施をモニターする方策は IPNSの良い事例を広めるための方策はあるか	1.NFS,RRDI等 2.Agr. Office,Al,Farmer 1.Ai,Farmer 1.NFS,RRDI等 2.Agr. Office,Al 1.NFS,RRDI等 2.Agr. Office,Al 1.NFS,RRDI等 2.Agr. Office,Al	1.Questionnaire 2.Interview 1.Questionnaire 2.Interview 1.Questionnaire 2.Interview 1.Questionnaire 2.Interview	IPNSに係る多くの種類の活動が報告された。 AIは引き続き、農家を支援していく旨の報告がされた。 特になし。 特になし。 RRDIは引き続き技術指導が可能としている。また、一部で有機肥料使用拡大のための予算が手当てされている。		
sustainability 自立持続性	定性的	行政によるその他の支援(技術面/制度面)はあるか	1.NFS,RRDI等 2.Agr. Office,Al,Farmer	1.Questionnaire 2.Interview			
	定性的	研修/講師の質は高いか	1.NFS,RRDI等 2.Agr. Office,Al,Farmer	1.Questionnaire 2.Interview			

調査について Agr. Office, Al等、Farmerへの現場でのインタビューはローカルレベルとの契約により、1地区半日程度で実施。  
地区: クルナガラ(P) 2名  
1 農業事務所所長(標準) Director and Deputy Director level等  
2 農業事務所所長(標準) Al  
5名  
10名  
ハンパントタ(P) 10名  
ハンパントタ(P) 1 District 当たり約17名にInterview x 上記6地区  
アヌラダプラ(P) アヌラダプラ(P)

調查資料

NFS, RRD I, ナショナルコーディネーターへの質問票調査

質問票

NFS 回答

RRD I 回答

ナショナルコーディネーター回答

Terminal Evaluation of JICA Integrated Plan Nutrition System (IPNS) Project

## Questionnaire

This questionnaire consists of 8 parts, "Project Performance", "Implementation Process", "Relevance", "Effectiveness", "Efficiency", "Impact", "Sustainability", "Others".

Note: If some question is not applicable to your office, please skip the question.

---

1. "Project Performance"

Q1-1 What do you think about overall performance of the project?

Q1-2 According to PDM of the project, overall goal of the project is "to contribute for alleviating poverty in agricultural areas". What do you think about perspective for achievement of the Overall Goal?

2. "Implementation Process"

Q2-1 What do you think about overall management & operation of the project?

Q2-2 What do you think about method of training of the project?

Q2-3 Is there any difficulty regarding implementation process of the project?

3. "Relevance"

Q3-1 What do you think about consistency of the project purpose to the Sri Lankan Agricultural Policy?

4. "Effectiveness"

Q4-1 According to PDM of the project, Project purpose is "to promote the IPNS among food crop growers in major paddy and other food crop districts". What do you think about achievement of the Project Purpose?

Q4-2 What do you think about ability of trainees of IPNS after the project?

Q4-3 Are there any other programs which contribute to achieve the project purpose?

Q4-4 Is there any difficulty regarding Effectiveness of the project?

5. "Efficiency"

Q5-1 What do you think about achievement of the Project Outputs?

Outputs of the Project (PDM)

- (1) Dissemination of knowledge and skill on IPNS of Assistant Directors (AD) and Agricultural Instructors (AI) to the food crop growers will be strengthened and improved.
- (2) The confidence and ability of application of IPNS by food crop growers will be improved and diffused among food crop growers.

Q5.2 What do you think about inputs (items, quantity, timing) of the project?

Q5.3 What do you think about cost of the project?

Q5-4 Is there any difficulty regarding Efficiency of the project?

6. "Impact"

Q6-1 What do you think about "Impact" of the project to achieve the Overall Goal of the project?



Q6-2 Are there any other impacts (positive/negative) caused by the project?

7. "Sustainability"

Q7-1 Are there any measures taken to continue, monitor, diffuse IPNS practice?

Q7-2 What kind of future support for IPNS by the Government (technical & institutional) do you think / plan?

8. Others

Q8-1 Any other comment?

Thank you very much.

ATTEN. Mr. J. Yamada  
From: N.F.S.

Terminal Evaluation of JICA Integrated Plan Nutrition System (IPNS) Project

Questionnaire

This questionnaire consists of 7 parts: "Project Performance", "Implementation Process", "Relevance", "Effectiveness", "Efficiency", "Impact", "Sustainability".

Note: If any question is not applicable to your office, please skip the question.

1. "Project Performance"

Q1-1 What do you think about overall performance of the project?

Overall performances of the project is satisfied.

Q1-2 According to ODA of the project, overall goal of the project is "to contribute for alleviating poverty in agricultural areas". What do you think about perspective for achievement of the Overall Goal?

This project will help to alleviate of the poverty of the farmer and the people in Sri Lanka.

2. "Implementation Process"

Q2-1 What do you think about overall management & operation of the project?

Satisfied.

Q2-2 What do you think about method of training of the project?

Need improvements

Q3-0 Is there any difficulty regarding implementation process of the project?

NO

3. "Relevance"

Q3-1 What do you think about consistency of the project purpose to the Sri Lanka Agricultural Bank?

The project will help to ~~do~~ reduce the poverty of the farmers.

4. "Effectiveness"

Q4-1 According to PDPA of the project, Project purpose is "to promote the IPNS among food crop growers in major paddy and other food crop districts". What do you think about achievement of the Project Purpose?

Totally project purpose is achieved and it has to be continued.

Q4-2 What do you think about ability or trainees of IPNS after the project?

They are well trained enough to conduct such programmes in future.

Q4-3 Are there any other programs which contribute to achieve the project purpose?

- NO -

Q4-4 Is there any difficulty regarding Effectiveness of the project?

- NO -

5. "Efficiency"

Q5-1 What do you think about achievement of the Project Outputs?

Outputs of the Project (PDM)

- (1) Dissemination of knowledge and skill on IPNS of Assistant Directors (AD) and Agricultural Instructors (AI) to the food crop growers will be strengthened and improved.
- (2) The confidence and ability of application of IPNS by food crop growers will be improved and diffused among food crop growers.

Q5.2 What do you think about inputs (time, quantity, timing) of the project?

Q5.3 What do you think about cost of the project?

cost enough to implement the project

Q5-4 Is there any difficulty regarding Efficiency of the project?

NO

6. "Impact"

Q6-1 What do you think about "Impact" of the project to achieve the Overall Goal of the project?

poverty of the farmer reduced

Terminal Evaluation of JICA Integrated Plan Nutrition System (IPNS) Project

## Questionnaire

This questionnaire consists of 7 parts, "Project Performance", "Implementation Process", "Relevance", "Effectiveness", "Efficiency", "Impact", "Sustainability".

Note: If some question is not applicable to your office, please skip the question.

---

1. "Project Performance"

Q1-1 What do you think about overall performance of the project?

*Successful*

Q1-2 According to PDM of the project, overall goal of the project is "to contribute for alleviating poverty in agricultural areas". What do you think about perspective for achievement of the Overall Goal?

*With the execution of this project farmers were encouraged to use IPNS package to increase rice yield and I think farmer's rice yield increased by 20% after this project implemented. So overall goal archived by 75%*

2. "Implementation Process"

Q2-1 What do you think about overall management & operation of the project?

*Fairly good. If funds go directly to the persons who work with farmers then execution of the project may be faster*

Q2-2 What do you think about method of training of the project?

*Good. But resource persons could not meet farmers regularly due to the long distance from the Institute.*

Q2-3 Is there any difficulty regarding implementation process of the project?

*Purchasing of materials needed for the project was sometimes delayed due to the government tender procedures. Therefore it must be eased to a certain extent.*

3. "Relevance"

Q3-1 What do you think about consistency of the project purpose to the Sri Lankan Agricultural Policy?

*Project work is compatible with the Sri lankan Agricultural Policy and it is highly relevance*

4. "Effectiveness"

Q4-1 According to PDM of the project, Project purpose is "to promote the IPNS among food crop growers in major paddy and other food crop districts". What do you think about achievement of the Project Purpose?

*Of 4 districts that the project implemented, it was successfully done in three districts. I think project was not highly successful in one district due to an administration problem*

Q4-2 What do you think about ability of trainees of IPNS after the project?

*Trainees learned a lot and they have understood what IPNS is in crop production*

Q4-3 Are there any other programs which contribute to achieve the project purpose?

*Other farmer participatory extension program like Saruketha yaya has contributed to achieve the project purpose*

Q4-4 Is there any difficulty regarding Effectiveness of the project?

*Resource persons couldn't meet extension officers as well as farmers regularly due to financial resistance and their time allocation for the project.*

5. "Efficiency"

Q5-1 What do you think about achievement of the Project Outputs?

Outputs of the Project (PDM)

(1) Dissemination of knowledge and skill on IPNS of Assistant Directors (AD) and Agricultural Instructors (AI) to the food crop growers will be strengthened and improved.

(2) The confidence and ability of application of IPNS by food crop growers will be improved and diffused among food crop growers.

Q5.2 What do you think about inputs (items, quantity, timing) of the project?

*Sufficient, but has to be increased little bit*

Q5.3 What do you think about cost of the project?

*Should be increased by at least 10% due to the increase in material cost*

Q5.4 Is there any difficulty regarding Efficiency of the project?

*Regular meetings with farmers and extension officers was a problem*

6. "Impact"

Q6-1 What do you think about "Impact" of the project to achieve the Overall Goal of the project?

*Impact is good*

Q6-2 Are there any other impacts (positive/negative) caused by the project?

*There positive impact specially farmer's increase knowledge on IPNS and field problem identification*

7. "Sustainability"

Q7-1 Are there any measures taken to continue, monitor, diffuse IPNS practice?

*Yes, project must be implemented in all districts in Sri Lanka*

Q7-2 What kind of future support for IPNS by the Government (technical & institutional) do you think / plan?

*Funds must be supplied to implement the IPNS project work in other districts in the country*

8. Others

Q8-1 Any other comment?

*Facilities must be provided to the resource persons for regular meetings with farmers and extension workers. Financial administration must be with the project coordinator otherwise material needed for the project will be delayed and project functioning would be slow*

Dr. Wickramasinghe / National Project Coordinator

Terminal Evaluation of JICA Integrated Plan Nutrition System (IPNS) Project

## Questionnaire

This questionnaire consists of 7 parts, "Project Performance", "Implementation Process", "Relevance", "Effectiveness", "Efficiency", "Impact", "Sustainability".

Note: If some question is not applicable to your office, please skip the question.

---

### 1. "Project Performance"

Q1-1 What do you think about overall performance of the project?

Over all performance is very good in all the district except Hambantota during yala 2007 season. Performance at Polonnaruwa was very good and then Anuradhapura both Provincial and Interprovincial

Q1-2 According to PDM of the project, overall goal of the project is "to contribute for alleviating poverty in agricultural areas". What do you think about perspective for achievement of the Overall Goal?

Yes I think it was achieved by reducing the fertilizer usage and increased productivity due to adoption of IPNS practices.

### 2. "Implementation Process"

Q2-1 What do you think about overall management & operation of the project?

Fairly good, had some difficulties, some problems with poor noncooperating AI, Non availability of IPNS materials on time.

Q2-2 What do you think about method of training of the project?

I think is Good, We could have done one training with the field demonstration.



Q2-3 Is there any difficulty regarding implementation process of the project?

Yes. I think too many partners.

### 3. "Relevance"

Q3-1 What do you think about consistency of the project purpose to the Sri Lankan Agricultural Policy?

Very Contradictory. Its very difficult to implement a project like this to achieve the project objectives with present fertilizer subsidy scheme. Farmers are not interested in applying IPNS practices until they get fertilizer at subsidized rate

### 4. "Effectiveness"

Q4-1 According to PDM of the project, Project purpose is "to promote the IPNS among food crop growers in major paddy and other food crop districts". What do you think about achievement of the Project Purpose?

Very relevance

Q4-2 What do you think about ability of trainees of IPNS after the project?

No idea

Q4-3 Are there any other programs which contribute to achieve the project purpose?

No

Q4-4 Is there any difficulty regarding Effectiveness of the project?

No idea.

### 5. "Efficiency"

Q5-1 What do you think about achievement of the Project Outputs?

Outputs of the Project (PDM)

(1) Dissemination of knowledge and skill on IPNS of Assistant Directors (AD) and Agricultural Instructors (AI) to the food crop growers will be strengthened and improved.

Yes

(2) The confidence and ability of application of IPNS by food crop growers will be improved and diffused among food crop growers.

Yes

Q5.2 What do you think about inputs (items, quantity, timing) of the project?

Timing was bad, certain materials needed for IPNS field application could not be purchased at correct time due to various problems, Especially micro nutrient supply due to none availability and lack of commercial grade suppliers.

Q5.3 What do you think about cost of the project?

More work has been done with less cost.

Q5-4 Is there any difficulty regarding Efficiency of the project?

Difficult to collect farmers for various activities and that affected the efficiency of the project

6. "Impact"

Q6-1 What do you think about "Impact" of the project to achieve the Overall Goal of the project?

Impact was not much as the total number of farmers could not get participated on project activities as scheduled. If the extension could have really organized the farmer group of yaya , the impact would have been much larger.

Q6-2 Are there any other impacts (positive/negative) caused by the project?

7. "Sustainability"

Q7-1 Are there any measures taken to continue, monitor, diffuse IPNS practice?

Q7-2 What kind of future support for IPNS by the Government (technical & institutional) do you think / plan?

Continuous support needed to implement site specific fertilizer recommendation and the policies should be in line with those.

8.Others

Q8-1 Any other comment?

I think we made a mistake by selecting 4 districts to implement the programme and concentrated activities for one year. Instead , if we select two district and implemented the programme through out the project period, results would have been much better.

農家、農業普及員、農業事務所等へのインタビュー調査

インタビュー質問票

農家、農業普及員インタビュー結果概要とりまとめ表

農家、農業普及員インタビューに於ける質問票以外の主な発言内容

農業事務所責任者等個別聞き取り結果

2009/2/17 クルネガラ地区調査結果

2009/2/19 ポロンナルワ地区調査結果

2009/2/20 ハンバントタ（プロビンシャル）地区調査結果

2009/2/20 ハンバントタ（インタープロビンシャル）地区調査結果

2009/2/27 アヌラダプラ（インタープロビンシャル）地区調査結果

2009/2/27 アヌラダプラ（プロビンシャル）地区調査結果

（各地区調査資料）

調査依頼レター

出席者名簿

調査結果（オリジナル）

農家、農業普及員等インタビュー調査実施状況写真

## 農家、農業普及員、農業事務所等に対する質問票

(Interview to Provincial & Inter-Provincial Directors, AI & field officers, farmers)

.....

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(AI)

(Farmer)

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(AI)

(Farmer)

Q1.1.3 (to farmer,AI)Have you got confidence & ability of IPNS after the JICA project?

(AI)

(Farmer)

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(AI)

(Farmer)

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmer)

Q1.2.2 How many of you have tried IPNS practice?

(Farmer)

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

(Farmer)

Change of unit cost of food crop production

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmer)

(AI)

Q1.3.2 how much change?

(Farmer)

(AI)

Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmer)

(AI)

Q1.4.2 How much change?

(Farmer)

(AI)

Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmer)

(AI)

Q1.5.2 How much change?

(Farmer)

(AI)

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmer)

(AI)

Q1.6.2 What kind of change?

(Farmer)

(AI)

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Directors)

(AI)

(Farmer)

.....  
"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(Directors)

(AI)

(Farmer)

Q2.2.1 Is the training easy to understand?

(AI)

(Farmer)

Q2.2.2 What do you think about method of training?

(Directors)

(AI)

(Farmer)

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Directors)

(AI)

(Farmer)

Q2.4.1 Any impediments to implementation process of the IPNS project?

(Directors)

(AI)

(Farmer)

-----  
“Relevance”

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Directors)

(AI)

(Farmer)

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Directors)

(AI)

(Farmer)

-----  
"Effectiveness"

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

(Farmers)

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

(Farmers)

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(AI)

(Farmers)

Q4.2.2 How do you use equipment provided now?

(AI)

(Farmers)

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Directors)

(AI)

(Farmer)

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Directors)



(AI)

(Farmer)

---

“Efficiency”

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, trainings.

(Directors)

(AI)

(Farmer)

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Directors)

(AI)

(Farmer)

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Directors)

(AI)

(Farmer)

---

“Impact”

Q6.1.1 Any increase of income of food crop growers with IPNS practices?

(AI)

(Farmer with IPNS practice)

Q6.1.2 How much?

(AI)

(Farmer with IPNS practice)

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

(Farmer without IPNS practice)

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Directors)

(AI)

(Farmer)

-----  
“Sustainability”

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(AI)

(Farmer)

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(Directors)

(AI)

Q7.2.2 What kind of measures?

(Directors)

(AI)

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(Directors)

(AI)

Q7.3.2 What kind of measures?

(Directors)

(AI)

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(Directors)

(AI)

Q7.4.2 What kind of measures?

(Directors)

(AI)

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(Directors)

(AI)

(Farmer)

農家、農業普及員インタビュー結果概要とりまとめ表

IPNS -FINAL EVALUATION

Field Investigation  
Response from AI and Farmers Group

**Basic Investigation Data:**

No of Districts Covered- 4 Kurunegala, Hambantota, Polonnaruwa, Anuradhapura.

No	Districts	Participation			
		Farmers	AI	Others	Total
01	Kurunegala	11	08	02	21
02	Hambantota	16	14	08	38
03	Polonnaruwa	12	06	03	21
04	Anuradhapura	18	19	07	44
	<b>Total</b>	<b>57</b>	<b>47</b>	<b>20</b>	<b>124</b>

## Project Performance

### Achievement of Outputs

No	District	Do you know anything about IPNS before the JICA project				Have you got knowledge & skills of IPNS after the JICA Project				Have you got confidence and ability of IPNS after the JICA Project				Do you diffuse your knowledge to others			
		Q.1.1.1				Q.1.1.2				Q.1.1.3				Q.1.1.4			
		Far		AI		Far		AI		Far		AI		Far		AI	
Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
1	Kurunegala	11		8		11		8		11		8		11		8	
2	Hambantota	9	7	14		16		14		16		14		16		14	
3	Polonnaruwa	8	4	6		12		6		12		6		6		6	
4	Anuradhapura	5	13	19		18		19		18		19		17		19	
	<b>Total</b>	<b>33</b>	<b>24</b>	<b>47</b>		<b>57</b>		<b>47</b>		<b>57</b>		<b>47</b>		<b>50</b>		<b>47</b>	

### Application Rate of IPNS

No	District	Have you tried IPNS practice after the JICA Training				How many of you have tried IPNS practice				Kind of Practices Tried- (Common for all districts)	
		Q.1.2.1				Q.1.2.2					
		Far		AI		Far		AI			
Y	N	Y	N	Y	N	Y	N	Y	N		
1	Kurunegala	11				11					Used straw, PHC, Green manure, Cow dung, Goat Dung
2	Hambantota	16				16					Deep Plough- recommended Seed Paddy
3	Polonnaruwa	12				12					Application of Fertilizer according to the time frame
4	Anuradhapura	18				10	8				Application of Micro nutrients- Water Management
	<b>Total</b>	<b>57</b>				<b>49</b>	<b>8</b>				Organic Fertilizers- Soil Test & recommended fertilizers

### Change of Unit Cost

Districts	Any change of paddy production cost					How much change - (Paddy production cost)						
	Q.1.3.1					Q.1.3.2						
	Farmer			AI		Farmer			AI			
	Y	N	no comment	Y	N	No comment	Up	Down	Same	Up	Down	Same
Kurunegala	11			08			11			08		
Hambantota	16			07		07	10	06				07
Polonnaruwa	12			06			06	06			06	
Anuradapura	18			08		06	05	09			08	06 n/i
	57			29		13	32	21		14	08	13

n/i = No Idea

### Change of Paddy Yield

Districts	Any change of paddy Yield among IPNS practicing farmers					
	Q.1.4.1					
	Farmer			AI		
	Y	N	no comment	Y	N	No comment
Kurunegala	11			08		
Hambantota	10		06	07		07
Polonnaruwa	12			06		
Anuradapura	18			13		06
	57			34		13

**Change of fertilizer use**

Q.1.5.1	Any change of use of organic / inorganic fertilizer							
	Q.1.5.1							
	Farmer				AI			
Districts	Y	N	no comment	Y	N	No comment		
Kurunegala	11			08				
Hambantota	16			14				
Polonnaruwa	12			06				
Anuradapura	17	1		19				
	<b>56</b>	<b>1</b>		<b>47</b>				

Change of Farming practice pattern

Q.1.6.1	Any change of farming practice pattern						
	Q.1.6.1						
	Farmer			AI			
Districts	Y	N	no comment	Y	N	No comment	
Kurunegala	11			08			
Hambantota	16			14			
Polonnaruwa	12			06			
Anuradapura	18			19			
	57			47			

Implementation Process

Q.2.1.1	Management & operation of the overall project.						
	Q.2.1.1.						
	Farmer			AI			
Districts	Good	Medium	Bad	No comments	Good	Medium	Bad
Kurunegala	11					08	
Hambantota		16				14	
Polonnaruwa	06	06				06	
Anuradapura	09	09			04	15	
	26	31			04	43	



## Understanding of the Training

Q.2.2.1	Understanding of the training						
	Q.2.2.1						
	Farmer			AI			
Districts	Easy	Not easy	no comment	Easy	Not easy	No comment	
Kurunegala	11			08			
Hambantota	16				14		
Polonnaruwa	12			06			
Anuradapura	18			19			
	57			33	14		

## Method of Training

Q.2.2.2	Method of Training						
	Q.2.2.2						
	Farmer			AI			
Districts	Good	Medium	Bad	No comments	Good	Medium	Bad
Kurunegala	11				08		
Hambantota	06	10				14	
Polonnaruwa	12				06		
Anuradapura	18				05	14	
	47	10			19	28	

**Keeness to learn**

Q.2.3.1		Keeness to learn						
		Q.2.3.1						
Districts		Farmer			No comments	AI		
		High	Medium	Low		High	Medium	Low
Kurunegala	11				08			
Hambantota	16				14			
Polonnaruwa	12				06			
Anuradapura	18				19			
	<b>57</b>				<b>47</b>			

## 農家、農業普及員インタビューに於ける質問票以外の主な発言内容

### Kurunegala

- Very important program because it is reduced the chemical fertilizer use.
- We can cultivate without poisonous chemicals and fertilizers.
- Delay in supply of materials
- Fund flow to be increased for efficiency of the programme.

### Polonnaruwa

- Farmers never know the micro nutrients deficiency
- Expand this program to Polonnaruwa district in YaYa based.

### Hambantota

- Delay in soil sample test reports
- Transfer of directors and others disturbed the coordination of the program.
- Bottom up policy to be carried out.
- Time constraints
- Expand the program to other farmers.
- Some more encouragement should be provided. Ex. Competitions among IPNS farmers.
- Foreign and local exposure trip to the farmers.
- Micro nutrients to be provided for concessionary rate for the farmers
- Systems should be changed.

### Anuradhapura

- Facilities to be provided for soil test at district level
- Purchase of micro nutrients is difficult
- Urea use reduced from 125 Kg per acre to 65 Kg per acre.
- Soil test for all the farmers in the Yaya.
- Provide Inputs on time
- Give this knowledge to the new generation (Youth)
- Model IPNS farm land visited by school children for their education purposes.
- Sample Bio-kit cups were too small to grow till collect the harvest.
- Reduce the cost to introduce farm mechanical equipments.
- High yielding seed paddy to IPNS farmers.
- Provide seed distribution machines to farmers.

## Provincial and Inter-Provincial Office 責任者等個別聞き取り結果

- H-P: Hambantota Provincial 20 Feb. 10:00  
Mr. C.Nanayakkara, Deputy Director  
Ms.S.K.N.Rubasinghe, Assistant Director
- H-IP: Hambantota Inter-Provincial 20 Feb. 14:00  
Mr.Hiran Peiris, Assistant Director
- A-IP: Anuradhapura Inter-Provincial 27 Feb. 10:00  
Mr.I.W.K.Imbulgoda, Assistant Director
- A-P: Anuradhapura Provincial 27 Feb. 13:30  
Mr.P.R.Mahindapala, Deputy Director

### Q0 What is your Overall Impression of this project?

(H-P) コンセプトは大変良い。投入のタンニングは良くなかった。トレーニングの時間は十分でなかった。農家は IPNS を理解した。化学肥料の使用が減って、有機肥料（わら等）を使用。

(H-IP) IPNS は重要であり、これは唯一の IPNS プロジェクトである。IPNS のアウェアネスを行い、農家と議論して、長期の経済に資するものであり、JICA プロジェクトは大変良い。1yaya(約 20ha)に 2 人の農家（約 1ha の水田）に Soil sample を採取し、他の全ての農家(15-25 農家)にも見てもらう。3 回のトレーニングがある。

(A-IP) JICA プロジェクトは、前向きな考え方で、新しいアプローチで、実践的であり、農家は土の状況（何が不足しているか）を知り、良い収入を得ることに資するものである。トレーニングプログラム、Bio Test Kit、デモンストレーションは良かったが、Best Yield を見せるための微量要素がまだ来ていない。

(A-P) コンセプトは大変タイムリーである。収入増、収量増、コスト減、環境面に資する。スリランカでも現在 Let us cultivate, build nation programme を行っており、このなかで有機肥料使用増と 2010 までの化学肥料 25%削減に取り組んでいる。トレーニングは良かった。しかし、微量要素がまだ届いていない。投入のタイミングなどマネージメントに課題があった。

### Q1.2.1 Do you know any IPNS practice after the JICA project?

(H-IP) 継続している。トレーニングが短くて、微量要素の実践的な経験ができていない。

(A-IP) 有機肥料の使用が続いている。25%の農家が有機肥料（わら、緑肥+化学肥料）を使っている。

Q1.6.1 Any change of farming practice pattern?

(H-P) 有機肥料（牛糞、くん炭）利用が多くなっている。

(H-IP) まだ、農家は完全な自信を持つに至ってはず、化学肥料の利用減には繋がっていない。しかし、農家は有機肥料（牛糞、わら、グリディシア等）利用の効果は知っている。化学肥料に多額の補助があるので減らすのは難しい。しかし、政策でも化学肥料削減を目指している。

(A-IP) 農家は IPNS に熱心。化学肥料の節約ができた。有機肥料で収量低下を心配。大規模なキャンペーンが必要。

Q1.7.1 Perspective for achievement of overall goal?

(H-P) 有機肥料の利用と、化学肥料・化学農薬の削減を通じて達成できる。初めは効果が良くわからなかった。

(H-IP) IPNS で、収量増→収入増、有機肥料使用→コスト削減ができる。

(A-IP) また、パイロットとして限られた数の農家が参加しただけである。

(A-P) Yes. 他にも関係するプログラムを実施している。しかし、有機は労働集約型である。今回のテストでは、IPNS の効果が良くわからなかった。

Q2.1.1 What do you think about overall management & operation of the project?

(H-P) 調整に課題があった。また、関係者の異動もあった。インプットが遅れた。

(H-IP) 課題があった。課題は相互にリンクしていた。2007-08Maha では2件の移動費請求だけであった。全てが遅れていた。その後は少し改善した。

(A-IP) コロンボ・オリエンテッドであった。現場の問題が伝わっていない。微量要素が遅れた。

(A-P) 全体が遅れた。微量要素は届いていない。AI はガソリン代が不足していた。

Q2.3.1 How is needs / keenness of trainees?

(H-P) Yes. 農家は IPNS が有効であることを知った。

(H-IP) Yes. 農家と農業普及員は IPNS の効果を知った。

(A-IP) Yes. 農家は大変興味を持った。特に自身の土の状況を知ることで、肥料コストを削減できる。

(A-P) IPNS の効果が良くわからなかった。差が見えなかった。

Q3.1.1 Number of trainee appropriate?

(H-P) 27yaya, 10farmers/yaya である。

(H-IP) 44yaya から 88farmers (10%程度), 2yaya/AI, もっと数を増やしたい。

(A-P) 予算があればトレーニングを全体に広めたい。

#### Q4.3.1 Any other Program for IPNS?

(H-IP) 有機肥料生産、有機栽培奨励の予算は多少あるが、微量元素を購入する予算は無い。

#### Q5.1.1 Is the inputs appropriate?

(H-P) only 1farmer/yaya で少ない。デモのみであった。

(H-IP) Input は遅れた。満足できるレベルではない。

(A-IP) 微量元素はまだ届いていない。CHB は既に配分された。PEACE は現場に近く対応が早く、直接のコーディネートが良い。

#### Q7.1.2 Any measures after JICA project?

(H-P) 農業局から IPNS への予算はない。しかし、技術、知識は現在 AI に蓄積された。予算があれば同じ活動を継続したい。有機肥料（牛糞、わら、グリーングラム）が不足している。もっとトレーニングが必要である。

(H-IP) 微量元素の予算は無い。技術と知識は得られた。化学肥料の申込書に有機肥料の併用が求められている。

(A-IP) Let us cultivate, build nation programme で多少の種子や有機肥料のサポートはできるが、Soil アナリシスや微量元素は手配できない。

(A-P) 継続したい。Let us cultivate, build nation.の予算は十分でないが、有機肥料（コンポスト、牛糞等）は少し支援している。IPNS のトレーニングは継続できるが、微量元素は高価であり買えない。また、他国の先進地で研修したい。

17/02/2009/- 9.30 a.m at Bathalagoda RRDl conference Hall.

KURUNEGALA- Bathalagoda

(AI)

“Project Performance”

Achievement of Outputs

Q 1.1.1 Do you know anything about IPNS before the JICA project?

(AI)

Yes

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(AI)

Able to understand the deficiency of plant nutrition through the Bio-kit and understand more on micro nutrients.

Q1.1.3 (to farmer,AI)Have you got confidence & ability of IPNS after the JICA project?

(AI)

The knowledge on increasing the yield of paddy and its quality through IPNS established and increased further.

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(AI)

Yes

Disseminate the knowledge to other officers and the farmers.

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

Q1.2.2 How many of you have tried IPNS practice?

All of us

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(AI)

Unit cost decreased.

Q1.3.2 how much change?

(AI)

15% decreased. We were not been able to use the prescribe micro nutrients during the period and we used only N.P.K. and carbonic materials. In this season (2008-09 Maha) we used micro nutrients. Results not analyze yet.

#### Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(AI)

Yes

Q1.4.2 How much change?

(Farmer)

20 Bu. per acre increased

#### Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(AI)

Yes.

Q1.5.2 How much change?

(AI)

Carbonic fertilizer use and the Quantity increased. (About 40%) . Some of the chemical fertilizer use decreased and some fertilizer use increased depending on the soil test.

#### Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(AI)

Yes



Q1.6.2 What kind of change?

(AI)

Observing the soil test kits, farmers understand the plant nutrients deficiency and they applied chemical and organic fertilizer accordingly.

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(AI)

75% of farmers those who participate for the IPNS program achieved Positive results and their income increased by 20%. We were not been able to joined the other farmers in Yaya due to practical problems.

---

"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(AI)

Technical Management of the IPNS program was good. Using the state funds and practicing the government tender procedure for purchasing delayed the process.

Q2.2.1 Is the training easy to understand?

(AI)

Yes.

Q2.2.2 What do you think about method of training?

(AI)

Good.

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(AI)

Good

Q2.4.1 Any impediments to implementation process of the IPNS project?

(AI)

Provide facilities for the training with Publication, Electronic Audio/Visual media for the farmers groups, Provide facilities to spent the money directly. Provide residential training to the farmers and the Officers.

---

**“Relevance”**

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(AI)

Too small

Q3.2.1 Any impediments to Relevance of the IPNS project?

(AI)

Provide financial support and other help in a basis of one Agricultural instructor with a group consisting only 5 farmers.

---

**“Effectiveness”**

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

Yes

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

To be improved. Two training for a one Season (Kannaya).

**Use of equipment provided (Paddy Husk Burner)**

Q4.2.1 Where is the equipment provided by the project now?

(AI) No equipments received yet.(Paddy Husk Burners)

Other office equipment at the Head Office.

Q4.2.2 How do you use equipment provided now?

(AI)

Get the work done where the equipments is available.

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(AI)

2008 Project for Carbonic fertilizer Production

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(AI)

Provide infrastructure and other facilities for the officers contributing to this IPNS project .Eg.

- # Agricultural sub centres to be upgraded as Resource Centres.
- # Transport facilities should be provided. (Motor cycles)
- # Provide cost of Transport

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(AI)

Not adequate

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(AI)

No

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Please see the Question no. 4.4.1

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(AI)

Yes ,

Q6.1.2 How much?

(AI)

20%

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

Yes

Less income for the farmers those who do not implement the IPNS practices

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(AI)

No negative results

---

**“Sustainability”**

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(AI)

Identify the nutrients deficiencies in plants

Keen interest on the use of carbonic fertilizer

Production increased due to above reasons. .

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(AI)

Provincial council support and motivating to continue the project.

Q7.2.2 What kind of measures?

(AI)

Received support through provincial council and projects.

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(AI)

Yes

Q7.3.2 What kind of measures?

(AI)

Data and reports were collected /taken through discussions and conferences.

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(AI)

Yes

Q7.4.2 What kind of measures?

(AI)

Provided through planned programme.

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(AI)

Local and foreign training for the officers

17/02/2009/- 9.30 a.m at Bathalagoda RRDI conference Hall.

KURUNEGALA- Bathalagoda

(Farmers)

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(Farmer)

Yes

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(Farmer)

We received a very methodical system of agriculture from this project.

Q1.1.3 (to farmer,AI)Have you got confidence & ability of IPNS after the JICA project?

(Farmer)

This IPNS project generated confidence among farmers to cultivate not only paddy but also other crops using the new system.

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(Farmer)

Yes

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmer)

Yes

Q1.2.2 How many of you have tried IPNS practice?

(Farmer)

All of us

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

(Farmer)

Use chemical and Carbonic fertilizer

- Use Straw for the field
- Deep plough
- Use Paddy husk charcoal
- use green leaves as fertilizer

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmer)

Paddy production cost increased.

Q1.3.2 how much change?

(Farmer)

About Rs. 2500/=

Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmer)

Yes

Q1.4.2 How much change?

(Farmer)

10-50 Bu. per acre increased

Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmer)

No change of chemical fertilizer. Increased the amount of Carbonic fertilizer.

Q1.5.2 How much change?

(Farmer)

4-5 Tractor load (large) of Carbonic fertilizer.

**Change of farming practice pattern**

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmer)

Yes

Q1.6.2 What kind of change?

(Farmer)

Our freedom was affected. (less free time)

Taken Soil samples, Used Carbonic fertilizer

**Perspective for achievement of Overall Goal**

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmer)

Positive change of our income. The change will continue.

-----  
**"Implementation Process"**

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmer)

Good

Q2.2.1 Is the training easy to understand?

(Farmer)

Training programs has been conducted in such a way to understand easily.

Q2.2.2 What do you think about method of training?

(Farmer)

It is good if the training was practical.

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmer)

We participated to the program because of our necessity and requirement.



Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmer)

Nothing special to mentioned.

---

“Relevance”

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmer)

Less is good

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmer)

There was a difficulty to find material for IPNS program.

---

“Effectiveness”

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Good qualitative status has been created.

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

It is with the farmer's groups. Some farmers built the paddy husk burners on their own.

Q4.2.2 How do you use equipment provided now?

(Farmers)

Exchange the equipments.

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Farmer)

Some farmers received dairy project help.(Cows)

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmer)

No

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmer)

Some equipments and materials not received on time. Eg. Sinc Sulphate

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmer)

Facilities were good. Distance was very far.

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Nothing special

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmer with IPNS practice)

Yes , Very good

Q6.1.2 How much?

(Farmer with IPNS practice)

About 30% increase

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmer without IPNS practice)

Yes, of course

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmer)

Less insects damages

Less water requirement

Less freedom for us

Increase quality of rice.

Increased rat population due to stack of hay.

---

“Sustainability”

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmer)

As mention above.

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(Directors)

(AI)

Q7.2.2 What kind of measures?

(Directors)

(AI)

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(Directors)

(AI)

Q7.3.2 What kind of measures?

(Directors)

(AI)

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(Directors)

(AI)

Q7.4.2 What kind of measures?

(Directors)

(AI)

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(Directors)

(Farmer)

Steps should be taken to open a market for the production.

19/02/2009/- 10.30 a.m at Kaduruwela Farmers Training Centre.

Polonnaruwa

(AI)

**“Project Performance”**

**Achievement of Outputs**

Q1.1.1 Do you know anything about IPNS before the JICA project?

(AI)

Yes. From the Diploma Course and through the training programs.

All Six AIs

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(AI)

Able to understand the deficiency of plant nutrition through the Bio-kit and understand more on micro nutrients using the colour code .All Six AIs

Q1.1.3 (AI)Have you got confidence & ability of IPNS after the JICA project?

(AI)

Yes. Skills and Confidence . All Six AIs

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(AI)

Yes.All Six AIs

**Application rate of IPNS practice**

Q1.2.1 Have you tried IPNS practice after the JICA training?

Yes. All Six AIs

Q1.2.2 How many of you have tried IPNS practice?

Yes.All Six AIs

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Farmers practicing Organic fertilizer application

(Straw, Paddy charcoal, Green leaves, Cow dung, Compost)

Growing Sun Hemp

Using chemical fertilizer according to the requirement and the instructions

Fertilizer Application on Time.

Apply UREA according to the colour of plant leaves.

Apply fertilizers based on the soil sample test.

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(AI)

Yes. Cost is more, compare to normal farming practices. (Transportation cost for organic fertilizer.)

Q1.3.2 how much change?

(AI)

Cost depending on the distance of transport, Type of organic fertilizer and the amount of fertilizer

#### Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(AI)

Yes. All Six AIs

Q1.4.2 How much change?

(AI)

15-25 Bu. per acre increased

#### Change of use of organic / inorganic fertilizer

Q1.5.1 (if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(AI)

Yes. All Six AIs

Q1.5.2 How much change?

(AI)

Carbonic fertilizer use and the Quantity increased.

Systematic use of chemical fertilizers

**Change of farming practice pattern**

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(AI)

Yes.All Six AIs

Q1.6.2 What kind of change?

(AI)

Deep ploughing

Apply Green Manure (fertilizers) between two cultivation period (Kannaya)

Quality seed paddy use

Motivation for producing compost

Motivation for using Cow dung

Planting live bio-fence for green manure.

Use chemical fertilizers according to the instruction to get 140 Bu per acre.

**Perspective for achievement of Overall Goal**

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(AI)

We are supporting the project objectives. As field officers our objective is also to increase the farmers income.

.....  
**"Implementation Process"**

Q2.1.1 What do you think about overall management & operation of the overall project?

(AI)

A delay in providing some resources and some inputs on time.

Soil sample test report delayed.

Right amount of subsidized chemical fertilizers not received on time

Due to the reason of transport cost reimbursement for transport of carbonic fertilizer, farmers were keen

Q2.2.1 Is the training easy to understand?

(AI)

Yes. All Six AIs

Q2.2.2 What do you think about method of training?

(AI)

Good. All Six AIs

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(AI)

Yes. To solve the IPNS related problematic areas, we participated to the program keenly.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(AI)

Yes. All Six AIs

---

**“Relevance”**

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(AI)

Sufficient (Suitable)

Q3.2.1 Any impediments to Relevance of the IPNS project?

(AI)

No

---

**“Effectiveness”**

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

Yes. All Six AIs



Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

Satisfy with the skills.

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(AI) No equipments received yet.(Paddy Husk Burners)

N/A

Q4.2.2 How do you use equipment provided now?

(AI)

N/A

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(AI)

N/A

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(AI)

N/A

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Ai)

Time not adequate

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(AI)

No

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Yes.

Difficult to collect animal fertilizers.

We loose our straw at the field due to some farmers misconduct and carelessness.

They burn all stock of straw in the Yaya

Transport problems for the officers

---

**“Impact”**

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(AI)

Yes , All Six AIs

Q6.1.2 How much?

(AI)

20% -25% increase

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

Yes.All Six AIs

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(AI)

Yes. All Six AIs. Positive results

Resistance to deceases and pests

---

**“Sustainability”**

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(AI)

10 farmers

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(AI)

Yes..

Q7.2.2 What kind of measures?

(AI)

# One acre demonstration plot maintaining to show the maximum yield.

# Conducting Field Days

# Conducting programs for carbonic fertilizer production.

# Programs for green manure production

\* Gliriseadia Plantation (Bio -fence)

\* Providing Sun hemp seeds

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(AI)

Yes

Q7.3.2 What kind of measures?

(AI)

Collecting monthly progress reports

Field monitoring activities

Continues supervision

Officer Training programs. .

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(AI)

Yes

Q7.4.2 What kind of measures?

(AI)

# One acre demonstration plot maintaining to show the maximum yield.

# Conducting Field Days

# Conducting programs for carbonic fertilizer production.

# Programs for green manure production

\* Gliriseadia Plantation (Bio-fence)

\* Providing Sunhemp seeds

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(AI)

We expect the future support

19/02/2009/- 10.30 a.m at Farmers Training Centre-Kaduruwela.  
POLONNARUWA

(Farmers)

Group 1

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(Farmers)

No- All 06 farmers

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(Farmers)

Yes-All six farmers

Q1.1.3 (to farmer, AI) Have you got confidence & ability of IPNS after the JICA project?

(Farmers)

Yes-All six farmers

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(Farmers)

No

Other farmers not accepting due to non exposure to the IPNS programs.

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmers)

Yes-All six farmers

Q1.2.2 How many of you have tried IPNS practice?

All of us

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Apply straw- All six farmers

Apply Cow dungs - All six farmers

Paddy Husk Charcoal- 05 farmers

Chemical Fertilizers -All six farmers

Paddy plants colour was good and 03 farmers reduced the use of chemical fertilizer.

All six farmers used Compost to the field.

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmers)

No reduction of Cost. but little increase of income

Q1.3.2 how much change?

(Farmers)

Increase of the yield was 15-20 (Bu) per acre. For some farmers it was 5-10 (BU)

#### Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmers)

Yes

Q1.4.2 How much change?

(Farmer)

04 farmers' yield was increased 15-20 Bu. per acre

01 farmer's Yield was increase 40 (Bu) per acre

01 farmer's Yield was increase 05-10 Bu per acre

#### Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmers)

Yes.

Total fertilizer usage increased- All 06 farmers

Chemical fertilizer (Urea) usage decreased (03 Farmers)

Q1.5.2 How much change?

(Farmers)

10% to 15%. decreased of Urea fertilizer application- 03 farmers

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmers)

Yes-Some extent 06 farmers

Q1.6.2 What kind of change?

(Farmers)

Increased of per acre yield..

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmers)

Per acre yield increased due to IPNS knowledge and the practices. IPNS program is a successful program.06 farmers

-----  
"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmers)

It is better and generate best results if IPNS program select at least 20-25 farmers from one yaya during a cultivation season in Polonnaruwa district other than selecting farmers from here and there.. All 06 farmers

Q2.2.1 Is the training easy to understand?

(Farmers)

Yes. All 06 farmers

Q2.2.2 What do you think about method of training?

(AI)

Training methodology is Good. All 06 farmers

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmers)

High keenness. All 06 farmers

Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmers)

Yes .All 06 farmers

There were some problem while putting micro nutrients in to the containers and maintaining the kits.

---

**“Relevance”**

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmers)

Too small. Number should be increased. All 06 farmers

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmers)

No. All 06 farmers .

---

**“Effectiveness”**

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes.All 06 farmers

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Satisfy. All 06 farmers

**Use of equipment provided (Paddy Husk Burner)**

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

No equipments received yet.(Paddy Husk Burners)



Q4.2.2 How do you use equipment provided now?

(Farmers)

N/A

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Farmer)

Yes

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmers)

Scarcity of Carbonic fertilizer- Specially Cow dung. All 06 farmers

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmers)

Not provided

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmers)

Training conducted at Farmers Houses

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Not sufficient amount of carbonic fertilizer

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmers)

Yes ,Only IPNS farmers. All 06 farmers

Q6.1.2 How much?

(Farmers)

05 to 10 Bu) per acre

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmers)

Yes. All 06 farmers

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmers)

Positive change towards development

-----

“Sustainability”

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmers)

Application of carbonic fertilizer.

Balance chemical fertilizer use as required

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(AI)

Provincial council support and motivating to continue the project.

Q7.2.2 What kind of measures?

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

Q7.3.2 What kind of measures?

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

Q7.4.2 What kind of measures?

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?  
(Farmers)

Need the support.

Q1.5.2 How much change?

(Farmers)

Minimum use of Urea and other chemical fertilizer

Optimum use of organic fertilizer (Straw, green manure, cow dung burned paddy husk)

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmers)

Yes

Q1.6.2 What kind of change?

(Farmers)

Deep ploughing (specially use of disk plough and mould board

Minimum use of Chemical/ Pesticides / Weedicides

Use of organic fertilizer.

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmers)

Successfully achieved this goal.

To gain the optimum yield and reduce the cost.

-----  
"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmers)

Very success and it is very good

Q2.2.1 Is the training easy to understand?

(Farmers)

Easily understand. It is explain very siply.

Q2.2.2 What do you think about method of training?

It is also very good.

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmers)

High keenness.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmers)

First time JICA gave the micro nutrients but other seasons did not given.

Non availability of micro nutrients

High cost of micro nutrients.

---

**“Relevance”**

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmers)

No. Very small.

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmers)

No

---

**“Effectiveness”**

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes.

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Quality of the training and the trainers are very good.

**Use of equipment provided (Paddy Husk Burner)**

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

No equipments received yet.(Paddy Husk Burners)

Q4.2.2 How do you use equipment provided now?

(Farmers)

N/A

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Farmer)

Yes

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmers)

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmers)

Yes

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmers)

Yes. Appropriate

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

No

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmers)

Yes ,

Q6.1.2 How much?

(Farmers)

Increase the income Rs. 14,000/= per acre.

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmers)

Yes. All 06 farmers

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmers)

Positive impact

---

“Sustainability”

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmers)

About 10 examplesd

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

Yes.

Q7.2.2 What kind of measures?

Continues supervision of field level knowledge

Distribution of Sunhenp seeds among farmers.

held training classes and field days.

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

Yes

Q7.3.2 What kind of measures?

Field supervision of the AI range under the govijana sewa range. (Supervision of ADA's in district office and the SMO- Paddy)

Held on acre maximum demostration yaya among yaya level

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

Yes

Q7.4.2 What kind of measures?

Continuesly give the technical support by the AII

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(Farmers)

No



20/02/2009/- 10.00 a.m at Netolpitiya Agricultural Services Centre.  
Netolpitiya- Hambantota

(AI)

**"Project Performance"**

**Achievement of Outputs**

Q1.1.1 Do you know anything about IPNS before the JICA project?

(AI)

Yes. From the Diploma Course and through the training programs.

All Seven AIs

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(AI)

Understand more on micro nutrients and developed the knowledge and skills

.All seven AIs

Q1.1.3 (AI)Have you got confidence & ability of IPNS after the JICA project?

(AI)

Yes. Skills to be developed . All Seven AIs

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(AI)

Yes. All Seven AIs

**Application rate of IPNS practice**

Q1.2.1 Have you tried IPNS practice after the JICA training?

Yes. All Seven AIs

Q1.2.2 How many of you have tried IPNS practice?

Yes. All Seven AIs

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Farmers practicing- Organic fertilizer application

Taking Soil samples

Test for identifying micro nutrition deficiency in plants.

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(AI)

Yes.

Q1.3.2 how much change?

(AI)

Rs. 2000 - 2500 per acre Cost.

**Change of paddy yield**

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(AI)

Yes. All Seven AIs

Q1.4.2 How much change?

(AI)

15-20 Bu. per acre increased

**Change of use of organic / inorganic fertilizer**

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(AI)

Yes. All Seven AIs

Q1.5.2 How much change?

(AI)

Carbonic fertilizer use and the Quantity increased Tonne per acre

Chemical fertilizer use decreased by 20 kgs to 25 kgs

**Change of farming practice pattern**

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(AI)

Yes.All Seven AIs

Q1.6.2 What kind of change?

(AI)

Farmers observation capacity increased.

Aware and alert on environmental changes.

Keen on organic farming

**Perspective for achievement of Overall Goal**

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(AI)

Our objective is also to increase the farmers income but it will achieve in the long run.

Soil formation, Soil Structure and ventilation increase after carbonic fertilizer use. It will help for micro biological change of the soil and soil fertility will increase in the long run. Our hope is to increase the yield through practicing this process.

-----  
**"Implementation Process"**

Q2.1.1 What do you think about overall management & operation of the overall project?

(AI)

Not satisfied

Overall management and the systematic implementation to be improved.

Q2.2.1 Is the training easy to understand?

(AI)

No. It was not easy

Q2.2.2 What do you think about method of training?

(AI)

Practical exercises were not enough for the training .

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(AI)

Yes.

Requirement and keenness was good

Q2.4.1 Any impediments to implementation process of the IPNS project?

(AI)

Yes.

---

**“Relevance”**

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(AI)

Sufficient (Suitable)

Q3.2.1 Any impediments to Relevance of the IPNS project?

(AI)

No

---

**“Effectiveness”**

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

No.

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

Not satisfy .

**Use of equipment provided (Paddy Husk Burner)**

Q4.2.1 Where is the equipment provided by the project now?

(AI)

It is with the farmers

Q4.2.2 How do you use equipment provided now?

(AI)

Exchange among farmers group.

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example “Granary Area Programme”?

(AI)

Yes. Granary Area Programme”, Pest control program.

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(AI)

Yes

---

**“Efficiency”**

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Ai)

Inputs was appropriate but it was not received on time. it hindered the progress.

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(AI)

Not sufficient

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Yes.

Training: . The basic training was not adequate.

Inputs: Some inputs difficult to find

Inputs provided not received on time.

---

**“Impact”**

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(AI)

Yes ,

Q6.1.2 How much?

(AI)

15% increase

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

Yes.

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(AI)

Yes. Positive results

---

“Sustainability”

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(AI)

Awareness on the importance of applying the carbonic fertilizer.

Habit of observation of the plantation of the field

Fertilizer application only after Identify the micro nutrients deficiency

Develop the group dynamism among farmers. .

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(AI)

Yes..

Q7.2.2 What kind of measures?

(AI)

# applying of Paddy husk charcoal.

# Carbonic fertilizer use

# Further training for the farmers.

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(AI)

Not aware up to now.

Q7.3.2 What kind of measures?

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(AI)

Yes

Q7.4.2 What kind of measures?

(AI)

# applying of Paddy husk charcoal.

# Carbonic fertilizer use

# Further training for the farmers.

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(AI)

Not known

20/02/2009/- 10.00 a.m at Netolpitiya Agricultural Services Centre.

Netolpitiya -Hambantota

(Farmers)

**"Project Performance"**

**Achievement of Outputs**

Q1.1.1 Do you know anything about IPNS before the JICA project?

(Farmers)

Yes - 04 Farmers

No - 01 farmer

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(Farmers)

Yes-All Five farmers

Q1.1.3 (to farmer,Al) Have you got confidence & ability of IPNS after the JICA project?

(Farmers)

Yes-All Five farmers

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(Farmers)

Yes

All five farmers.

**Application rate of IPNS practice**

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmers)

Yes-All five farmers

Q1.2.2 How many of you have tried IPNS practice?

18 farmers



Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Apply Straw-

Apply Cow dung -

Paddy Husk Charcoal-

Goat dung application

Deep ploughing

Water Management

Chemical Fertilizers -According to the need

Prescribed seed paddy usage (2 1/2 Bu per acre.

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmers)

Yes

Q1.3.2 how much change?

(Farmers)

(Not answered)

#### Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmers)

Yes

Q1.4.2 How much change?

(Farmer)

Increase of the yield was 20-35 (Bu) per acre

#### Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmers)

Yes.

Q1.5.2 How much change?

(Farmers)

Total fertilizer usage increased- All 06 farmers

Chemical fertilizer (Urea) usage decreased 20% to 25% (05 Farmers)

Put all the straws into the field(05 Farmers)

Application of Paddy Husk Charcoal 250 Kg to 300 Kg for the field (4 farmers)

Use Cow dung as much as possible. (05 farmers)

**Change of farming practice pattern**

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmers)

Yes-Some extent

Q1.6.2 What kind of change?

(Farmers)

Land Preparation, Fertilizer Application, Water Management, Selection of sed paddy. .

**Perspective for achievement of Overall Goal**

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmers)

Per acre yield/income increased ]

-----  
**"Implementation Process"**

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmers)

Satisfied for the management of the program .Providing Paddy Husk burner and soil test equipment will expedite the process.

Q2.2.1 Is the training easy to understand?

(Farmers)

Yes.

Q2.2.2 What do you think about method of training?

(Farmers)

Satisfy

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmers)

High keenness.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmers)

Yes .

There were some problems. Faced difficulty for deep Ploughing, Collecting Cow dung, Collecting Paddy Husk etc.

---

**“Relevance”**

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmers)

Suitable. Could be increased .

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmers)

No.

---

**“Effectiveness”**

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes.

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Satisfy.

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

With the farmers

Q4.2.2 How do you use equipment provided now?

(Farmers)

Exchange

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Farmer)

Yes, "Granary Area Programme", Integrated Pest Control program

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmers)

Yes,

Flood, unavailability of Tractors, Sprayers, problem of water supply to the field due to improper Tank bund and irrigation canals.

-----  
"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmers)

Appropriate but Paddy husk burners can be used only for 1 1/2 year to 2 years

New technological knowledge should be provided with new training program.

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmers)

Not adequate.

No. of Training days should be increased.

Provision of necessary micro nutrients.

provision of other equipments- Parachute trays.

Seeding equipments

Weeder

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Yes,

Problems in the irrigation canals.

---

**“Impact”**

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmers)

Yes , All five farmers.

Q6.1.2 How much?

(Farmers)

Rs. 10000/=to 15,000/=

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmers)

Yes. All 05 farmers

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmers)

no

---

**“Sustainability”**

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmers)

Application of carbonic fertilizer.

Pest control

Land preparation

Water Management

Use other inputs

Q1.3.2 how much change?

(AI)

Purchase Amonia· sulphate to replace urea. Cost was the the same. .

Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(AI)

Harvesting still not being done.

Q1.4.2 How much change?

(AI)

Could get the results after harvesting.

Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(AI)

Yes. All Seven AIs

Q1.5.2 How much change?

(AI)

Carbonic fertilizer use and the Quantity increased.

10% increase of Paddy husk charcoal use after providing Kunthanis

All Seven AIs

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(AI)

Yes.All Seven AIs

Q1.6.2 What kind of change?

(AI)

All Seven AIs

Keenness on soil testing.

Motivated to use micro nutrients..

Use of Paddy husk charcoal

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(AI)

Yes, All Seven AIs

Hope is to increase the yield through practicing this process.

-----  
"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(AI)

All Seven AIs

Inputs not received on time.

Soil testing delayed.

Biological tool kit received after the Kannaya (Season) Due to all these reasons we could not plan our work properly.

Q2.2.1 Is the training easy to understand?

(AI)

. It was not clear.

Q2.2.2 What do you think about method of training?

(AI)

Practical exercises were not enough for the training .

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(AI)

Yes. All Seven AIs

Q2.4.1 Any impediments to implementation process of the IPNS project?

(AI)

Yes. All Seven AIs

-----  
"Relevance"

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(AI)

Sufficient (Suitable)

Q3.2.1 Any impediments to Relevance of the IPNS project?

(AI)

No

-----  
"Effectiveness"

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

Normal. All Seven AIs

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

Trainers have the ability. Due to the time and practical work constrain, it was difficult to understand.

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(AI)

It is with the farmers in Yaya

Q4.2.2 How do you use equipment provided now?

(AI)

Provided to farmers societies during the training program..



Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(AI)

Yes. All Seven AIs

Granary Area Programme",  
Farmers Production Societies

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(AI)

Yes. Difficult to buy the micro nutrients from the market. Price also very high.

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Ai)

Inputs was appropriate but it was not received on time.

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(AI)

Sufficient

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Yes.

Inputs provided not received on time.

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(AI)

Could be found after crop investigation. ,

Q6.1.2 How much?

(AI)

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

Yes. All Seven AIs

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(AI)

Yes. Positive results

---

"Sustainability"

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(AI)

# applying of Paddy husk charcoal.

# Carbonic fertilizer use

# Investigating the soil sample test. .

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(AI)

Yes..

Q7.2.2 What kind of measures?

(AI)

Take the program to non IPNS farmers.

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(AI)

Yes

Q7.3.2 What kind of measures?

(AI)

Participate to the programs

Getting information about the programs.

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(AI)

Yes

Q7.4.2 What kind of measures?

(AI)

Included in to the extension services program.

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(AI)

To be received

Micro nutrients for affordable price.

Free soil sample tests.

# Payment for the farmers participated for this program is important.

(Farmers)

Group 1

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(Farmers)

Yes - 05 Farmers - Through instructions from agriculture department.

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(Farmers)

Yes-All Five farmers

Q1.1.3 (to farmer,AI) Have you got confidence & ability of IPNS after the JICA project?

(Farmers)

Yes-All Five farmers

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(Farmers)

Yes

All five farmers.

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmers)

Yes-All five farmers

Q1.2.2 How many of you have tried IPNS practice?

Yes-All five farmers

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Application according to the soil test- 4 farmers

Carbonic fertilizer application - 1 farmer

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmers)

Yes-All five farmers

Q1.3.2 how much change?

(Farmers)

. 25% change

#### Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmers)

Yes-All five farmers

Q1.4.2 How much change?

(Farmer)

Increase of the yield 500-600 kg per acre for each 5 farmers

#### Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmers)

Yes.

Q1.5.2 How much change?

(Farmers)

Chemical fertilizer usage decreased and carbonic increased

Put straws into the field 2 tonne-each farmers (05 Farmers)

Application of Paddy Husk Charcoal 250 Kg for the field (5 farmers)

40 bundles of green leaves (green Manure) 3 farmers

Use Cow dung 2 tonnes 2 farmers

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmers)

Yes

Q1.6.2 What kind of change?

(Farmers)

More time devoted for farming.

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmers)

50% project goal achieved

-----  
"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmers)

Three farmers not received micro nutrients on time.

2 farmers received micro nutrients on time.

It is good if contributed to provide carbonic fertilizers.

Q2.2.1 Is the training easy to understand?

(Farmers)

Yes.

Q2.2.2 What do you think about method of training?

(Farmers)

Suitable

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmers)

High keenness.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmers)

Yes

---

“Relevance”

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmers)

Suitable.

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmers)

The Change could Not be seen so there was no high keenness. .

---

“Effectiveness”

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes.

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Very good

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

With the farmers

Q4.2.2 How do you use equipment provided now?

(Farmers)

Exchange

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Farmer)

Yes,

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmers)

Yes,

Difficult to get carbonic fertilizer

Soil sample test not possible for all the farmers

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmers)

No, 3 farmers

Yes, 2 farmers

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmers)

Yes

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Yes,

Difficult to get carbonic fertilizer

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmers)

Yes , All five farmers.



Q6.1.2 How much?

(Farmers)

R.s. 12,500/=

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmers)

Yes. All 05 farmers

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmers)

Yes, Environmental friendly.

Salinity reduced

---

"Sustainability"

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmers)

5 farmers

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

Q7.2.2 What kind of measures?

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

Q7.3.2 What kind of measures?

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

Q7.4.2 What kind of measures?

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?  
(Farmers)

Yes,

Chemical fertilizer subsidy

Knowledge gain from the agricultural Department.

20/02/2009/- 02.00 P.M at Inter-provincial Office  
Hambantota- IP

(Farmers)

Group 2

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(Farmers)

No.

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(Farmers)

Yes-Gained knowledge

Q1.1.3 (to farmer,AI) Have you got confidence & ability of IPNS after the JICA project?

(Farmers)

Yes

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(Farmers)

Yes

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmers)

Yes

Q1.2.2 How many of you have tried IPNS practice?

16

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Application of carbonic fertilizers (Cow dung, Straw, PHC , Green leaves ,

Chemical fertilizer application according to the need of the soil condition.

Application of fertilizer according to the required time frame.

Add the micro nutrients to the soil.

Proper water management

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmers)

Yes

Q1.3.2 how much change?

(Farmers)

.Cost reduced compare to the last season.

Saved Rs. 285/= per acre from chemical fertilizer use

Saved Rs. 2500/= through not using chemical pesticides. .

#### Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmers)

Harvesting not done

Q1.4.2 How much change?

(Farmer)

Harvesting not done

#### Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmers)

Yes. Some change has happened

Q1.5.2 How much change?

(Farmers)

Put straws into the field (Straw from one acre land )

Application of Paddy Husk Charcoal 250 Kg for the field

350 bundles of green leaves (green Manure)

Use Cow dung 2 tonnes

**Change of farming practice pattern**

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmers)

Yes

Q1.6.2 What kind of change?

(Farmers)

Trend towards carbonic agriculture.

**Perspective for achievement of Overall Goal**

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmers)

Low cost and high yield

.....  
**"Implementation Process"**

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmers)

Provide inputs on time.

Q2.2.1 Is the training easy to understand?

(Farmers)

Yes.

Q2.2.2 What do you think about method of training?

(Farmers)

Good, Suitable

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmers)

High keenness.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmers)

Yes

Provide inputs on time.

---

**“Relevance”**

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmers)

It is Suitable to make aware more on the program. .

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmers)

No

---

**“Effectiveness”**

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes.

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Good

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

With the farmers' societies

Q4.2.2 How do you use equipment provided now?

(Farmers)

Exchange (provide some more Kunthanis)

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Farmer)

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmers)

Yes,

Shortage of Kunthanis

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmers)

Get Training and equipment on time.

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmers)

Yes

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Yes,

Soil test for all the farmers.

-----  
"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmers)

Yes ,

Q6.1.2 How much?

(Farmers)

Not done the harvesting but target could be achieved. .

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmers)

Yes.

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmers)

Yes, Positive impacts

Less insects damages due to Environmental friendly farming methods. .

Salinity reduced due to application of PHC and other carbonic materials.

-----  
"Sustainability"

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmers)

5 farmers

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

Q7.2.2 What kind of measures?

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

Q7.3.2 What kind of measures?



Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

Q7.4.2 What kind of measures?

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?  
(Farmers)

(AI)

group 1

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(AI)

Yes. 4/4

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(AI)

Yes. 4/4

Q1.1.3 (AI) Have you got confidence & ability of IPNS after the JICA project?

(AI)

Yes. 4/4

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(AI)

Yes. 4/4

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

Q1.2.2 How many of you have tried IPNS practice?

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(AI)

Yes 4/4

**Q1.3.2 how much change?**

(AI)

- # IPNS helps to lower the salinity of the field and increase the yield.
- # Result of the micro nutrients application less unfertile (Sterility) seeds and more seeds in the bunch provide good yield with more weight.
- # Carbonic fertilizers help steady and symmetrical growth of the plants
- # Carbonic fertilizers and micro nutrients help to strengthen the plants stem and provide resistance to the insects decease as well as prevent collapsing the plants. Less crop damage due to this reasons.
- # Yield increase 20 Bu per acre. (Rs. 12,300/= per acre--- 20.5X20 Bu X 30.00)  
Less chemical fertilizer application (Urea 50 kg and Potasium- K- 15 kg)

**Change of paddy yield**

**Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?**

(AI)

Yes 4/4.

**Q1.4.2 How much change?**

(AI)

20 Bu per acre

**Change of use of organic / inorganic fertilizer**

**Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?**

(AI)

Yes 4/4.

**Q1.5.2 How much change?**

(AI)

Less chemical fertilizer application (Urea 50 kg and Potasium- K- 15 kg)

**Change of farming practice pattern**

**Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?**

(AI)

Yes.4/4

Q1.6.2 What kind of change?

(AI)

Application (spread) of straw just after harvesting and PHC application

Preparation of Bio-Fence

Home based compost preparation

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(AI)

Increase yield and soil quality improved

-----  
"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(AI)

Implement the program on time (Soil test reports and supply of Micro nutrients)

Q2.2.1 Is the training easy to understand?

(AI)

Yes. 4/4.

Q2.2.2 What do you think about method of training?

(AI)

Some easy to practice methodology. Develop a system to get the practical training for the officers also.

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(AI)

Yes. very keen interest.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(AI)

Yes. Transport problems. While implementing provide facilities and benefits to all stakeholders.

-----  
"Relevance"

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(AI)

Sufficient (Suitable)

Q3.2.1 Any impediments to Relevance of the IPNS project?

(AI)

No

-----  
"Effectiveness"

Quality of training & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

Yes 4/4

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

Good

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(AI)

It is with the farmers in Yaya

Q4.2.2 How do you use equipment provided now?

(AI)

Exchange..

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(AI)

Yes. 4/4

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(AI)

No.

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Ai)

No..

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(AI)

No. Distance and facilities

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

No.

Inputs provided not received on time.

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(AI)

Yes

Q6.1.2 How much?

(AI)

20 Bu per acre

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

Yes. /4

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(AI)

No

---

“Sustainability”

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(AI)

6

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(AI)

Yes.. 4/4

Q7.2.2 What kind of measures?

(AI)

Take the program with Nishpadana yaya program and Chakreeya yaya program

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(AI)

Yes 4/4

Q7.3.2 What kind of measures?

(AI)

Organize field day for carbonic fertilizer application.

Conducting farmers training program

Monitoring the program

collecting reports

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(AI)

Yes 4/4

Q7.4.2 What kind of measures?

(AI)

Provide PH burners

Motivate to develop Bio-Fence and application green manure.

Production of compost.

Conduct Sramadana campaign in each Kannaya to promote carbonic fertilizer applications.

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(AI)

Government has to promote carbonic fertilizer application.



27/02/2009/- 10.00 A.M at Provincial Office  
Anuradhapura –IP

(AI)

group 2

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(AI)

Yes.

Training programs of the agriculture department

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(AI)

Yes

Q1.1.3 (AI)Have you got confidence & ability of IPNS after the JICA project?

(AI)

Yes. .

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(AI)

Yes.

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

Q1.2.2 How many of you have tried IPNS practice?

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(AI)

Yes . .

Q1.3.2 how much change?

(AI)

30% at the beginning .

Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(AI)

Yes

Q1.4.2 How much change?

(AI)

30 Bu per acre. .

Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(AI)

Yes.

Q1.5.2 How much change?

(AI)

Carbonic fertilizer use and the Quantity increased by 50%

05% decrease of Chemical fertilizer use.

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(AI)

Yes.

Q1.6.2 What kind of change?

(AI)

Cultivation according to the season( Kannaya)

Micro Nutrients use

Carbonic fertilizer use.

Use Chemical fertilizer based on the soil sample test reports

Deep plough

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(AI)

Yes,

Hope is to increase the yield through practicing this process. right things at right time

---

"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(AI)

Good as a whole

Q2.2.1 Is the training easy to understand?

(AI)

. Yes.

Q2.2.2 What do you think about method of training?

(AI)

Not enough .

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(AI)

Yes.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(AI)

If the inputs received prior to the program starts program would be better .

---

"Relevance"

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(AI)

Sufficient (Suitable)

Q3.2.1 Any impediments to Relevance of the IPNS project?

(AI)

Program much more successful if inputs receive on time.

-----

“Effectiveness”

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

Yes

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

Trainers have the ability.

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(AI)

It is with the farmers

Q4.2.2 How do you use equipment provided now?

(AI)

Exchange.

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example “Granary Area Programme”?

(AI)

Yes.

Wari Pubudu Project

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(AI)

Productivity to be increased targeting the whole group with inputs and activities.

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Ai)

Sufficient, According to the time and the group

Equipments not sufficient

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(AI)

Not Sufficient,

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(AI)

Yes

Q6.1.2 How much?

(AI)

30 to 35 Bu per acre

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

Yes.All Seven AIs

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(AI)

Yes. Positive results

-----  
"Sustainability"

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(AI)

# Cultivate according to the Kannaya (Season)

# Cultivate Yaya together

# Less Agro Chemical

# Good water management practices

# Carbonic fertilizer use

# Improved group dynamism

# Post harvest quality improved.

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(AI)

Yes..

Q7.2.2 What kind of measures?

(AI)

Chakkriya Yaya program. (Saruketha Yaya Program ).

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(AI)

Monitoring the field training

Conducting Crop surveys

Collecting crop report.

Monitoring all the activities.

Q7.3.2 What kind of measures?

(AI)

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(AI)

Yes

Q7.4.2 What kind of measures?

(AI)

Continues monitoring and observation of the programme.

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(AI)

Yes

Api wawamu , Rata nagamu program

27/02/2009/- 10.00 A.M at Provincial Office of Agriculture  
Anuradhapura- IP

(Farmers)

Group 1

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(Farmers)

Yes. All five farmers

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(Farmers)

Yes- Gained knowledge and skills

Q1.1.3 (to farmer, AI) Have you got confidence & ability of IPNS after the JICA project?

(Farmers)

Yes- Gained confidence and ability.

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(Farmers)

Yes

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmers)

Actively participating now.

Yes

Q1.2.2 How many of you have tried IPNS practice?

all

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Application of carbonic fertilizers (Cow dung, Straw, PHC , Green leaves ,



Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmers)

Yes-

Reduced the expenditure for chemical agricultural inputs.

Q1.3.2 how much change?

(Farmers)

20% cost reduction

#### Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmers)

Yield increased

Q1.4.2 How much change?

(Farmer)

20% increased

#### Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmers)

Yes. Carbonic fertilizer usage increased.

Q1.5.2 How much change?

(Farmers)

Remarkable change

#### Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmers)

Yes

Q1.6.2 What kind of change?

(Farmers)

Some positive changes. Quality seed paddy use, Parachute method, Seeders, Application of Straw, Cow dung, PHC etc.

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmers)

Could be achieved with the knowledge inputs and contribution of all the farmers.

-----  
"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmers)

Q2.2.1 Is the training easy to understand?

(Farmers)

Yes. Easy to understand

Q2.2.2 What do you think about method of training?

(Farmers)

Good, To be extended to more participants.

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmers)

High keenness to gain new knowledge.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmers)

There was no such particular problems but faced new threat after application of straw in to the field (Rat fever)

-----  
"Relevance"

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmers)

Very small .

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmers)

Transport problem and insufficient quantity of cow dung

-----  
"Effectiveness"

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes.

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Training and trainers are Good

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

With the farmers' Houses

Q4.2.2 How do you use equipment provided now?

(Farmers)

Exchange

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Farmer)

Support of the Government officers.

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmers)

Yes,

Transport problem and insufficient quantity of cow dung

---

“Efficiency”

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmers)

Provide new technological equipments.

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmers)

Yes

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Yes,

Transport problems and less human resources.

---

“Impact”

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmers)

Yes , some extent

Q6.1.2 How much?

(Farmers)

10% to 15%

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmers)

Yes.

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmers)

Yes, Positive impacts

---

**“Sustainability”**

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmers)

Application of carbonic fertilizers (Cow dung, Straw, PHC , Green leaves, Quality seed paddy use, Deep plough, etc.

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

Q7.2.2 What kind of measures?

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

Q7.3.2 What kind of measures?

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

Q7.4.2 What kind of measures?

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(Farmers)

Hope to get .

27/02/2009/- 10.00 A.M at Provincial Office of Agriculture  
Anuradhapura- IP

(Farmers)

Group 2

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(Farmers)

No. All four farmers

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(Farmers)

Yes All

Q1.1.3 (to farmer, AI) Have you got confidence & ability of IPNS after the JICA project?

(Farmers)

Yes All

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(Farmers)

Yes. All

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmers)

yes. All

Q1.2.2 How many of you have tried IPNS practice?

All

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Application of carbonic fertilizers (Cow dung, Straw, PHC , Green leaves ,

Soil Test

Application of prescribe fertilizers

Q 1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmers)

Yes 3/4

Reduced the expenditure for chemical agricultural inputs.

Q1.3.2 how much change?

(Farmers)

Rs. 2000/=

Change of paddy yield

Q 1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmers)

Yes 2/4

Q 1.4.2 How much change?

(Farmer)

Not harvested yet 2/4

10 Bu per acre. 1/4

Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmers)

Yes 3/4

Change could be seen

Q1.5.2 How much change?

(Farmers)

Can't say correctly

Not harvested yet

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmers)

Yes- 3/4

Q1.6.2 What kind of change?

(Farmers)

Extra time and labour inputs. 3/4

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmers)

Our objective is to get high yield.

-----  
"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmers)

If the farmers are keen to implement this program it will give good results

Q2.2.1 Is the training easy to understand?

(Farmers)

Yes. Easy to understand

Q2.2.2 What do you think about method of training?

(Farmers)

Good,

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmers)

High keenness to gain knowledge.



Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmers)

Supply of Micro nutrients was difficult

There is no system to carry out soil test for all the farmers.

Supply of carbonic fertilizer was difficult.

---

“Relevance”

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmers)

No.

Too small .All

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmers)

No All

---

“Effectiveness”

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes.

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Good All

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

With a farmer in the area.

Q4.2.2 How do you use equipment provided now?

(Farmers)

Exchange

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(Farmer)

Yes .

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmers)

Yes,

Due to climatic changers.

---

"Efficiency"

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmers)

Yes All.

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmers)

No All

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

No All,

---

"Impact"

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmers)

Yes ,All

Q6.1.2 How much?

(Farmers)

110 Bu per acre.

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmers)

Yes.

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmers)

No

-----  
"Sustainability"

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmers)

Application of carbonic fertilizers (Cow dung, Straw, PHC , Green leaves, Application of micro nutrients.

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

Q7.2.2 What kind of measures?

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

Q7.3.2 What kind of measures?

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

Q7.4.2 What kind of measures?

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(Farmers)

Yes

27/02/2009/- 01.30 P.M at Provincial Office  
Anuradhapura -Provincial

(AI)

group 1

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(AI)

Yes.

Training programs of the agriculture department

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(AI)

Yes

Q1.1.3 (AI)Have you got confidence & ability of IPNS after the JICA project?

(AI)

Yes. .

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(AI)

Yes.

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

Q1.2.2 How many of you have tried IPNS practice?

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(AI)

Yes . .

Q1.3.2 how much change?

(AI)

15% at the beginning .

Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(AI)

Yes

Q1.4.2 How much change?

(AI)

15%-20% Bu per acre. .

Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(AI)

Yes.

Q1.5.2 How much change?

(AI)

20%

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(AI)

Yes.

Q1.6.2 What kind of change?

(AI)

Standard seed Paddy

Systematic weed control

Carbonic fertilizer use.

Use Chemical fertilizer based on the soil sample test reports

Integrated pest management system.

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(AI)

Yes,

High yield through soil quality development and less chemical fertilizer use.

-----

"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(AI)

Project objective was good but problems at practical implementation (Micro nutrients not received on time)

Q2.2.1 Is the training easy to understand?

(AI)

Yes.

Q2.2.2 What do you think about method of training?

(AI)

Good .

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(AI)

Yes.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(AI)

Not received inputs on time.

-----

"Relevance"

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(AI)

Sufficient (Suitable)

Q3.2.1 Any impediments to Relevance of the IPNS project?

(AI)

Yes, Soil test, Micro nutrients bio-kit, providing the Questionnaire

---

“Effectiveness”

Quality of training & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

Yes

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

good

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(AI)

It is with the farmers

Q4.2.2 How do you use equipment provided now?

(AI)

Exchange.

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example “Granary Area Programme”?

(AI)

Yes.

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(AI)

Project contribution to be increased.

---

“Efficiency”

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Ai)

Yes

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(AI)

No

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Motivation not sufficient

Providing inputs on time.

---

“Impact”

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(AI)

Yes

Q6.1.2 How much?

(AI)

15% to 20% Bu per acre

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

Yes.

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(AI)

No



-----  
“Sustainability”

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(AI)

- # Carbonic fertilizer use
- # Systematic Agricultural Practices
- # Use prescribe Fertilizers
- # Integrated pest management.

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

(AI)

Yes..

Q7.2.2 What kind of measures?

(AI)

Continue the IPNS Program

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

(AI)

Yes

Q7.3.2 What kind of measures?

(AI)

- Progress review
- Field days
- Crop Clinics
- Farmers Trainings
- Sramadana Campaigns
- Training Evaluation
- Crop assessments

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

(AI)

Yes

Q7.4.2 What kind of measures?

(AI)

Continues IPNS program

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(AI)

Yes

27/02/2009/- 01.30 P.M at Provincial Office  
Anuradhapura -Provincial

(AI)

group 2

"Project Performance"

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(AI)

Yes.

Training programs of the agriculture department

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(AI)

Yes

Q1.1.3 (AI)Have you got confidence & ability of IPNS after the JICA project?

(AI)

Yes. .

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(AI)

Yes.

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

Q1.2.2 How many of you have tried IPNS practice?

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(AI)

Harvesting not done . .

Q1.3.2 how much change?

(AI)

No idea

Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(AI)

No idea

Q1.4.2 How much change?

(AI)

No idea.

Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(AI)

Yes.

Q1.5.2 How much change?

(AI)

10%

Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(AI)

Yes.

Q1.6.2 What kind of change?

(AI)

Carbonic fertilizers with chemical fertilizers

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(AI)

Yes,

High yield through soil quality development and less chemical fertilizer use

---

"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(AI)

Less activities due to time constraint

Q2.2.1 Is the training easy to understand?

(AI)

Yes.

Q2.2.2 What do you think about method of training?

(AI)

Little advance training for the farmers..

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(AI)

Yes-good.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(AI)

At the beginning , not enough time.

---

"Relevance"

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(AI)

Sufficient (Suitable)

Q3.2.1 Any impediments to Relevance of the IPNS project?

(AI)

No

---

"Effectiveness"

Quality of training & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(AI)

Yes

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(AI)

Normal

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(AI)

It is with the farmers

Q4.2.2 How do you use equipment provided now?

(AI)

Exchange.

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example "Granary Area Programme"?

(AI)

No

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(AI)

Yes

Climate ,

Burning of straw,

No legal assistance

Farmers economic difficulties .

---

“Efficiency”

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Ai)

No

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(AI)

No

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

Farmers economic difficulties

Transport problems.

---

“Impact”

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(AI)

no idea

Q6.1.2 How much?

(AI)

Harvesting not done

Q6.2.1 Do you expect that income will increase with IPNS project?

(AI)

Yes. Due to soil quality increase the fertilizer application efficiency is high.

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(AI)

No

27/02/2009/- 01.30 P.M at Provincial Office of Agriculture  
Anuradhapura- Provincial

(Farmers)

“Project Performance”

Achievement of Outputs

Q1.1.1 Do you know anything about IPNS before the JICA project?

(Farmers)

No all 9 farmers

Q1.1.2 Have you got knowledge & skill of IPNS after the JICA project?

(Farmers)

Yes-Gained knowledge and skills

Q1.1.3 (to farmer,AI) Have you got confidence & ability of IPNS after the JICA project?

(Farmers)

Yes-

Q1.1.4 Do you diffuse your IPNS knowledge to others?

(Farmers)

Yes 8 farmers

No - 1 farmer

Application rate of IPNS practice

Q1.2.1 Have you tried IPNS practice after the JICA training?

(Farmers)

Actively participating now.

Yes-

Q1.2.2 How many of you have tried IPNS practice?

Only one

Others want to implement

Q1.2.3 (if some farmers have tried IPNS) What kind of practice have you tried?

Application of carbonic fertilizers



Q1.3.1 (if some farmers have tried IPNS) Any change of paddy production cost?

(Farmers)

Yes- 2 farmers applied 25 kg less.

No pesticide use.

Reduced the expenditure for chemical agricultural inputs.

Q1.3.2 how much change?

(Farmers)

Saved from pesticide- Rs. 1000/=

and 25 Kg of Urea.

#### Change of paddy yield

Q1.4.1 (if some farmers have tried IPNS) Any change of paddy yield?

(Farmers)

Yield increased

Q1.4.2 How much change?

(Farmer)

20Bu- to 30 Bu per acre (2 farmers)

#### Change of use of organic / inorganic fertilizer

Q1.5.1(if some farmers have tried IPNS) Any change of use of organic / inorganic fertilizer?

(Farmers)

Yes. Carbonic fertilizer, straw, Cow dung, PHC, (All 9 farmers.

Q1.5.2 How much change?

(Farmers)

?

#### Change of farming practice pattern

Q1.6.1 (if some farmers have tried IPNS) Any change of farming practice pattern?

(Farmers)

Yes- Competitive environment created for carbonic fertilizer usage

Q1.6.2 What kind of change?

(Farmers)

Carbonic fertilizer use

Compare the yield with other farmers.

Perspective for achievement of Overall Goal

Q1.7.1 Overall goal of the project is to increase of farmer's income. What do you think about perspective for achievement of Overall Goal?

(Farmers)

Good program

---

"Implementation Process"

Q2.1.1 What do you think about overall management & operation of the overall project?

(Farmers)

Yes

Q2.2.1 Is the training easy to understand?

(Farmers)

Yes.

Q2.2.2 What do you think about method of training?

(Farmers)

Good,

Understand because it simplicity

Q2.3.1 How is needs / keenness of trainees to learn IPNS? (High?)

(Farmers)

High keenness

Training quality was not good where electricity facilities not available.

Q2.4.1 Any impediments to implementation process of the IPNS project?

(Farmers)

No

---

“Relevance”

Q3.1.1 Is the number of trainees appropriate? (too many or too small or suitable)

(Farmers)

Sufficient .

Q3.2.1 Any impediments to Relevance of the IPNS project?

(Farmers)

---

“Effectiveness”

Quality of trainings & Ability of trainers

Q4.1.1 Is this training of IPNS easy to understand?

(Farmers)

Yes.

Q4.1.2 What do you think about quality of training you received & ability of trainers?

(Farmers)

Training and trainers are Good

Use of equipment provided (Paddy Husk Burner)

Q4.2.1 Where is the equipment provided by the project now?

(Farmers)

4 items with the farmers' Houses

5 Items with AI s

Q4.2.2 How do you use equipment provided now?

(Farmers)

Exchange

Q4.3.1 Any other programmes / projects to contribute to effectiveness of the IPNS project, for example “Granary Area Programme”?

(Farmer)

No

Q4.4.1 Any impediments to Effectiveness of the IPNS project?

(Farmers)

Yes,

Supply of carbonic fertilizers on time is difficult

---

“Efficiency”

Q5.1.1 Is the inputs (items, quantity, timing) from the project appropriate?

Inputs are money, equipment, training.

(Farmers)

Time insufficient.

Q5.2.1 Is training facilities appropriate (distance, size, facility)?

(Farmers)

Yes-Transport problems for some farmers

Q5.3.1 Any impediments to efficiency of the IPNS project?

(Farmer)

No

---

“Impact”

Q6.1.1 Any increase of income of food crop growers with IPNS practices

(Farmers)

Yes ,

Q6.1.2 How much?

(Farmers)

15%

Q6.2.1 Do you expect that income will increase with IPNS project?

(Farmers)

Yes.

Q6.3.1 Any other impacts (positive/negative) caused by IPNS practices?

(Farmers)

Rats population increased due to application of straw.

Some time notice kind of fungus infection in the field.

---

“Sustainability”

Q7.1.1 How many numbers of good examples of IPNS done by farmers after JICA support?

(Farmers)

Competitive environment

Keeness

Keen to protect straw

Collective approach

Q7.2.1 Any measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support?

Q7.2.2 What kind of measures?

Q7.3.1 Any measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS?

Q7.3.2 What kind of measures?

Q7.4.1 Any measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS?

Q7.4.2 What kind of measures?

Q7.5.1 Any other future supports by the Government (Technical & Institutional)?

(Farmers)

Hope to get .

各地区調查資料

2009/2/17 クルネガラ地区

12<sup>th</sup>/02/2009

Mr. O.P. Kithsiri  
Deputy Director  
Provincial Department of Agriculture - NWP  
Kurunegala

Dear Sir

**TERMINAL EVALUATION OF THE JICA IPNS PROJECT**

As per the telephone conversation we had with you on 12<sup>th</sup> February 2009, we would like to confirm the following schedule as agreed.

**Objective of the meeting and the visit:**

To collect information and the feedback of the stakeholders and the beneficiaries of IPNS Project to evaluate relevance, effectiveness, efficiency, impact and sustainability of the Project.

**Date:** 17<sup>th</sup> February 2009

**Place of the meeting :** Bathalagoda Rice Research Station -

**Time:** 09.30 A.M. to 12.30 P.M.

**Participants: (please make necessary arrangement)**

1. Director/ Asst. Director
2. Deputy Director
3. 5 Agricultural Instructors (AI) and other field level Officers (Randomly selected officers who have participated in IPNS Project)
4. 10 farmers (Randomly selected farmers who have participated in IPNS Project)

Your kind cooperation in this regard is highly appreciated.

Thank you,  
Yours Sincerely

.....  
Junichiro Yamada  
IPNS Project Evaluation Team Leader  
Adviser for Agriculture, Irrigation and Rural Development  
JICA Expert

CC: Mr. Ranjan Dharmawaradana, Director, National Fertilizer Secretariat, MAD & AS  
Dr. W.M.A.D.W. Wickramasinghe, National Coordinator of IPNS Project  
Dr. Nimal Dissanayake, Director, Rice Research & Development Institute, DOA  
Dr. J.P. Atapattu, Assistant Director, Fertilizer Unit, Department of Agriculture  
Mr. Yuasa, Dr. Punchibanda, JICA Sri Lanka Office



17/02/2009

## Integrated Plant Nutrition System Programme

## Terminal Evaluation

## FIELD LEVEL MEETING

## ATTENDANCE

9.30 A.M.  
Bathalagoda - RRDI -

No	Name of the participant	Designation and place	Signature
01	Dr. Jayantha Atthapattu.	Dep. of Agriculture - Peradeniya.	
02	B.M. Nimesha Bandara.	AI. Kurunegala.	
03	M. W. S. Ariyaratne.	AI. Wellawa.	
04	S.M. Prema Sri Bandara.	AI. Ittagamuwa.	
F 05	D.M. Senewratne.	Chairperson, Kutupitiya farmers Society	
F 06	H.C. Mallowa.	Wellawa.	
07	Mrs. H.M.B. Menike	Wellawa.	
08	Mrs. B.M. Kusumawathie	AI. Bathalagoda.	
F 09	B.D. Dinapala.	Pera Wella.	
F 10	L.M. Sirisena Bandara	Boyangane.	
F 11	A.M. Heen Banda.	Kumbulwanga oya.	
F 12	D.B. Dharmayake.	Deeyawa.	
F 13	D.M.W. Dhasanayake.	Deeyawa.	
14	Mrs. D.M.S.P. Menike	AI - Ganewatta.	
15	R.H. Lanka ratne	AI. Kumbukgate.	
16	H.M.G. Herath.	AI. Madakapola.	
F 17	M.D.A - Gunathilake	Avenkele.	
F 18	E.P.D. Wickramasinghe	Welipitiya, Madakapola.	
F 19	W.A. Jayantha Karunathilake	Welipitiya - Madakapola.	
F 20	S.B.Y.M. Nishantha Herath	Pubbowa. Thalwita	
21			
22			
23			
24			
25			

1	Dr. Jayantha Atapattu. Dept. of Aquaculture, Peradeniya	ജെ. ജയന്ത	ജെ. ജയന്ത
2	B.Y. വർഗ്ഗം	- വർഗ്ഗം	വർഗ്ഗം
3	M.W.S. വർഗ്ഗം	മാനവ വിഭാഗം	മാനവ
4	വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
5	Dr. M. വർഗ്ഗം	മാനവ വിഭാഗം	മാനവ
6	H.C. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
7	H.M.B. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
8	B.M. വർഗ്ഗം	മാനവ വിഭാഗം	മാനവ
9	Dr. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
10	L.M. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
11	A. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
12	Dr. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
13	D.M.W. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
14	D.H.S.P. വർഗ്ഗം	മാനവ വിഭാഗം	മാനവ
15	R.H. വർഗ്ഗം	മാനവ വിഭാഗം	മാനവ
16	H.M.G. വർഗ്ഗം	മാനവ വിഭാഗം	മാനവ
17	M.A. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
18	C.P. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം
19	MA വർഗ്ഗം	"	"
20	S.B.Y.M. വർഗ്ഗം	വർഗ്ഗം	വർഗ്ഗം

17/02/2009 - Bathalagoda - Evaluation Meeting

④ Project performance

Agriculture Instructors (3)  
Kurunegala.

@ 1.1.1

Yes

Balthalagoda - 17/02/2020  
AI

1.1.2

Yes - විද්‍යාත්මක උපකරණයන් හඳුනාගැනීම සඳහා පරිපූරක මගින් හානිවිලි.  
+ සූදු මුලදායක පිළිබඳ අවබෝධයක් ලබාගැනීමට හැකිවිය.

1.1.3

වි මගාවේ අස්වැන්න හා ගුණාත්මක බව වැඩිකිරීම සඳහා ඒකාබද්ධ පළාති  
නෝද්‍යා ක්‍රමවේදය පිළිබඳ දැනුම තවදුරටත් තහවුරු කිරීමට හැකිවිලි.

1.1.4

- අතිභූත තිලධාරීන්ට හා ගොවිමහලුන්ට අවශ්‍ය දැනුම ලබාදීමට හැකිවිය.

② Application rate

1.3 නිෂ්පාදන වියදම

\* ඒකක නිෂ්පාදනයක වියදම අඩු වී ඇත.

1.3.1 15% හි පමණ අඩු වී ඇත

~~1.3.1~~ 15% හි පමණ අඩු වී ඇත. (නිර්දේශිත ප්‍රමාණයේ සූදු මුලදායක ප්‍රමාණය

1.3.2 සෛ කන්නස් යෙදීමට තොරතුරු වූ අතර N, P, K හා කාබනික  
ද්‍රව්‍යවල භාවිතය ගොදුරු ලදී. සෛ කන්නස් (2008-09 මස) සූදු  
මුලදායක ද යොදා ඇත. මේ දික්වා ප්‍රතිඵල විශ්ලේෂණය කර  
ගොටාන.

1.4.1. බවි

1.4.2. අන්තර්ගත ලුනල් 20 හි වැඩි වී ඇත.

1.5.1 බවි

1.5.2 කාබනික පොහොර භාවිතය හා ප්‍රමාණය වැඩි විය. (40% හි පමණ)  
රසායනික මුලදායක ඇතැම් පිරිස අඩු වූ අතර සමහර මුලදායක  
ප්‍රමාණයන් වැඩි ප්‍රමාණයක් යොදා ඇත. සෛ හස් පරිපූරක අනුපි  
තිර්තය විය.

- පවත් විය.

සමහර ගොවිමහලුන් කාබනික පොහොර හෝ අංකුලය මුලදායක  
පවදීමට ඉරා විය.

1.6.1 - බවි

1.6.2

ඉදුන් භර්ග්‍යවල වර්ග ගෝලී මනකුත් තලවල ගෝලී කිහිප  
දුර්ග්‍යවලත් සදුකාගාතිමට හැකිවිය. ඒ තුලින් අවශ්‍ය භර්දු රසායනික හා  
කාර්මික පොහොර ගෙදිලට නැඹුරු විය.

1.7.1

~~557-ක්-මමය~~

දුර්ග්‍ය වූ ගෝලීන්ගෙන් 757. ක් භර්ග්‍ය භාරජන විය. මවුලගේ ආදියට  
20 ක් වැඩිවිය. ඉගෙනීමේ ගැටළු විය යාමේ අවශ්‍ය ගෝලීන්  
ලේ පදනම හඳුන්වාදීමට හොඳින් විය.

1.2.1.1

ඒ තාක්‍ෂණ භර්ග්‍යවල ගෝලීන් සිදුකරුණු අතර රජයේ ප්‍රතිපාදන යොදා  
දුර්ග්‍ය මිලදී ගැනීමේදී රාජ්‍ය බෙහෙවින් ප්‍රතිපත්තිය නිසා දුර්ග්‍ය  
ලබාගැනීමේ අපහසු විය.

2.2.1

බවි

2.2.2

ගෝලී.

2.3.1

ගෝලී.

2.4.1

ගෝලී ගෝලී හත්සායම් දැනුමක් නිර්මාණය , ගුණාත්මක දෘෂ්ටිකෝණය  
ලබා ගැනීමේ පුහුණු ලබාදීමට පහසුකම් වැඩිදියුණු කිරීම. මුදල් ප්‍රතිපාදන කාර්ය  
විගුණී කිරීමට සලාස්ථිම. ගෝලීන්ට ආගමික නිලධාරීන්ට ගෝලීන්හි පුහුණුවීම  
ලබාදීමට කටයුතු කිරීම.

3.1.1

භූමා වැඩිය

3.2.1

අන් ආකාරයට දැනුමෙන් පිරිසිදු ගෝලීන් 5 පදනමක් හත්සායම් කළ  
ඒ කදන අවශ්‍ය ප්‍රතිපාදන ලබාදීම.

4.1.1  
බිම්

4.1.2  
වෙළඳිගුණ නළු ගුණයි. ~~මිනිස්~~ නත්තොට දෙපාර්ත<sup>මේන්</sup>ට පුහුණු නළු ගුණයි.

4.2.1  
සු.පි.පි.එන්.එන්. ව්‍යාපෘතියෙන් ලැබී ඇත. (දකුණු දූවුරු ප්‍රකාශනය)  
කාර්යාලීය ප්‍රකාශන ප්‍රධාන කාර්යාලයේ ඇත.

4.2.2  
ප්‍රකාශන ස්ථානකර වැනි ස්ථාන වලට ගොස් කාර්යයන් කරගනී.

4.3.1  
කෘතීම භෞමික විද්‍යාත්මක ව්‍යාපෘතිය වෙත 2005 වර්ෂයේ  
ක්‍රියාත්මක කරන ලදී.

4.4.1  
මෙම ව්‍යාපෘතියට දුගඟ වන නිලධාරීන්ගේ ගිණුම් පිහිටුවීම සාපේක්ෂ  
දිළි :- 1. නාමි. ප්‍ර. කාර්යාලය නමින් මධ්‍යස්ථාන බලධර පත් කිරීම  
(Resource Center)  
2. නිලධාරීන්ගේ මෙම පිහිටුවීම් සලකිමට කටයුතු කිරීම  
(ගුණ පාදි ලබාදීම)  
3. මෙම පියවරී ලබාදීම.

5.1.1  
ප්‍රධානමත් ගොවි.

5.2.1  
තාන

5.3.1  
4.4.1 ඔබේ දික්වා ඇත.

6.1.1  
බිම්.

6.1.2  
201.

6.2.1

බව

-IPNS ක්‍රියාත්මක කොටස ගොනිමගේ ආදායම IPNS ක්‍රියාත්මක කළ ගොනිමගේ වඩා වැඩිය.

6.3.1

එකලදී පැළෑටි නොමැත යන අදහසින් තොරව.

7.1.1

- පැළෑටි නොමැත යන අදහසින් තොරව නොමැත.
  - නවතම ආකාරයෙන් නවතම අදහසින් තොරව නොමැත.
- එම අදහසින් තොරව නොමැත.

7.2.1

එකලදී නොමැත යන අදහසින් තොරව නොමැත නොමැත නොමැත නොමැත.

7.2.2

එකලදී නොමැත යන අදහසින් තොරව නොමැත.

7.3.1 - බව

7.3.2 - නොමැත, නොමැත නොමැත නොමැත නොමැත නොමැත.

7.4.1 - බව

7.4.2 - නොමැත නොමැත නොමැත නොමැත නොමැත.

~~7.4.2~~

7.5.1

නොමැත ( නොමැත, නොමැත ) නොමැත. ( නොමැත )



අප, ඉතිහාසයේ ගොදුරේ,  
සිංහලයේ පැවැත් ගෙනියා යේ දී අපි ප්‍රධාන ගොවිතමය ආර්ථිකයක්  
විය.

ගොදුරේ ආර්ථිකයේ ස්වභාවයන් දී ඉහළ  
ගොවි ආර්ථිකයේ පැවැත් ගෙනියා යේ දී අපි ප්‍රධාන ගොවිතමය ආර්ථිකයක්  
විය.

දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

1) දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

2) 39 දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

3) දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

4) දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන

5) දිනපතා කටයුතු වන ගොවිතමයේ ප්‍රධාන  
ආකාරය වන ගොවිතමයේ ප්‍රධාන



විකල්පයක් ලෙසින්, සේවාවන් පිරිසිදු කිරීම සඳහා  
 පොදු ස්ථානවල පහත ක්‍රියාමාර්ගයක් ප්‍රයෝජනවත් වන බවට  
 සාක්ෂි ලබා දීමට අපට සමත් වීමට හැකි විය.  
 අදාළ ස්ථානවලට මෙහි කටයුතු සඳහා  
 අවශ්‍ය පියවර දීමට මෙම තීරණයෙන් අදාළව සේවකයන්  
 සහ සේවිකාවන්ට.

2009/2/19 ポロンナルワ地区

12<sup>th</sup>/02/2009

Mr. P.Sisirakumara  
Asst. Director of Agriculture  
Inter-Provincial Department of Agriculture - NCP  
Polonnaruwa

Dear Sir

**TERMINAL EVALUATION OF THE JICA IPNS PROJECT**

As per the telephone conversation we had with you on 12<sup>th</sup> February 2009, we would like to confirm the following schedule as agreed.

**Objective of the meeting and the visit:**

To collect information and the feedback of the stakeholders and the beneficiaries of IPNS Project to evaluate relevance, effectiveness, efficiency, impact and sustainability of the Project.

**Date:** 19<sup>th</sup> February 2009

**Place of the meeting :** Asst Director's Office- Polonnaruwa

**Time:** 10.30 A.M. to 12.30 P.M.

**Participants: (please make necessary arrangement)**

1. Director/ Asst. Director
2. Deputy Director
3. 5 Agricultural Instructors (AI) and other field level Officers (Randomly selected officers who have participated in IPNS Project)
4. 10 farmers (Randomly selected farmers who have participated in IPNS Project)

Your kind cooperation in this regard is highly appreciated.

Thank you,  
Yours Sincerely

.....  
Junichiro Yamada  
IPNS Project Evaluation Team Leader  
Adviser for Agriculture, Irrigation and Rural Development  
JICA Expert

CC: Mr. Ranjan Dharmawaradana, Director, National Fertilizer Secretariat, MAD & AS  
Dr. W.M.A.D. W. Wickramasinghe, National Coordinator of IPNS Project  
Dr. J.P. Atapattu, Assistant Director, Fertilizer Unit, Department of Agriculture  
Mr. Yuasa, Dr. Punchibanda, JICA Sri Lanka Office

7/10/2004

10.30 A.M.

Kallurawela - Ag. Service Centre.

**Terminal Evaluation**  
**FIELD LEVEL MEETING**  
**ATTENDANCE**

Polonnaruwa.

No	Name of the participant	Designation and place	Signature
01	U.K. Din Nilakshi Ranathunge	- ADA (IP) Polonnaruwa.	
02	K.A. Kamal Premaratne.	S.M.O (IP) Polonnaruwa.	
F 03	H.W. Karunaratne.	No: 109, yaya 3, Giritale.	
F 04	A.A. Dharmadasa.	No: 98 yaya 3 Giritale.	
F 05	A.M. Bandula Amarasinghe	No: 14.	
F 06	A. Abeywickrama	No: 74 - Sewagama.	
F 07	M. Puncti Banda.	No: 72 - Daturu Ela.	
08	H.R. Eeranthi Manjula	AI - Giritale.	
09	K.B. Deepthi Wimalaratne.	AI - Giritale	
10	W. Samantha Karunadena.	officer in charge. Training Centre. Polo	
11	Tharuja Wijayarathne.	AI DD office - Polonnaruwa.	
12	D.G. Sasana Kumara.	AI DD office - Polonnaruwa.	
F 13	W.D. Dharmasiri	99, Gannangolla. Perakram Samudra.	
F 14	G.G. Piyasiri Kulawansa.	14, Oregama.	
F 15	H.M. Karunaratne.	No: 33, 2 Ela, Polonnaruwa.	
F 16	K.M. Ranbanda.	Gannangolla.	
17	R.M.R.S Rajapaksha.	AI. DD office - Polonnaruwa.	
18	S.M. Sanehe latha	No: 30 Wewetherna - Polonnaruwa.	
19	K.G. Balasooriya.	AI. DD office Polonnaruwa	
F 20	B.G.G. Muthubanda.	No: 693 - Track 12, Sujanthi Pura.	
F 21	G. Martin	yaya 2	
22			
23			
24			
25			

Integrated Plant Nutrition System Programme

Terminal Evaluation

FIELD LEVEL MEETING

Polonnaruwa

ATTENDANCE

19/02/2009.

No	Name of the participant	Designation and place	Signature
01	U.K.D.N. Nilakshi Ranathunga	ADA (2P), Polonnaruwa	[Signature]
02	D.A. Kawal Permarathna	S.M.O. (IP), Polonnaruwa	[Signature]
03	W.H. Mahipala	2009.109.1	[Signature]
04	[Handwritten Name]	[Handwritten Designation]	[Signature]
05	[Handwritten Name]	[Handwritten Designation]	[Signature]
06	[Handwritten Name]	[Handwritten Designation]	[Signature]
07	[Handwritten Name]	[Handwritten Designation]	[Signature]
08	H.R. [Handwritten Name]	[Handwritten Designation]	[Signature]
09	K.B. [Handwritten Name]	[Handwritten Designation]	[Signature]
10	[Handwritten Name]	[Handwritten Designation]	[Signature]
11	Tharuja Wijayaratna	A.I., D.D. office, Pruwā	[Signature]
12	D.G. Swarna Kumari	A.I. D.D. office Polonnaruwa	[Signature]
13	[Handwritten Name]	[Handwritten Designation]	[Signature]
14	[Handwritten Name]	[Handwritten Designation]	[Signature]
15	[Handwritten Name]	[Handwritten Designation]	[Signature]
16	[Handwritten Name]	[Handwritten Designation]	[Signature]
17	R.M.R.S. [Handwritten Name]	[Handwritten Designation]	[Signature]
18	K.G. Balasooriya	AI - DD office - Polonnaruwa	[Signature]
19	[Handwritten Name]	[Handwritten Designation]	[Signature]
20	[Handwritten Name]	[Handwritten Designation]	[Signature]
21	[Handwritten Name]	[Handwritten Designation]	[Signature]
22			
23			
24			
25			

නීතියෙහි නිලධාරීන්ගේ වැඩසටහන (N.L.)  
දැනුම දැක්වීම - කාර්මික ප්‍රවේශන.

1.1.1 -  $\frac{6}{6}$  වන, කාර්මික නිර්මාණ කළමනාකරණයේ වටිනාකම රාජකාරි කටයුතු සහ දැනුම වැඩසටහන් මගින්.

1.1.2 -  $\frac{6}{6}$  පුනරුත්ථාපන ගණකා විද්‍යා පර්යේෂණ කාර්යයන් මගින් සේවක ප්‍රවේශන හඳුනාගැනීම සහ මණ්ඩල කාර්යයන් ආවේණිකව පවත්වා ගැනීම.

1.1.3 -  $\frac{6}{6}$  වන. භූමිකම්, ඉඩම් මිණීම.

1.1.4 -  $\frac{6}{6}$  වන.

1.2.1 -  $\frac{6}{6}$  වන.

1.2.2 -  $\frac{6}{6}$

- 1.2.3 - \* කාර්මික සේවක ආවේණිකව පවත්වා ගීම.  
 (විදුලි, දුරකථන, පුද්ගලික සේවක, දුරකථන මාරු කිරීමේදී)  
 \* නිලධාරීන් වෙත කාර්මික පවත්වා ගීම.  
 \* නිර්මාණයට අදාළ රජයේ සේවක සේවක ආවේණිකව පවත්වා ගීම.  
 \* නිලධාරීන් කළමනාකරණ සේවක සේවක.  
 \* පුනරුත්ථාපන පුනරුත්ථාපන ආවේණිකව පවත්වා ගීම.  
 \* පුනරුත්ථාපන පුනරුත්ථාපන ආවේණිකව පවත්වා ගීම.

1.3.1 - කාර්මික වන, (කාර්මික සේවක ප්‍රවේශන සහ සේවක සේවක ආකාරයේ වටිනාකම වැඩි කිරීම.)

1.3.2 - සේවක කාර්මික පුනරුත්ථාපන, වර්ගය හා ප්‍රවේශන සහ දුරකථන සේවක වීම.

1.4.1 -  $\frac{6}{6}$  බව

1.4.2 - ඉන්කරයක අභිවෘත්ත වැඩිය. අන්කරයට බුසල් 15 - 25 ඊලස වැඩි විය.

1.5.1 -  $\frac{6}{6}$  බව

1.5.2 - කාමික හෙහෙර නාමිකය වැඩි විය.  
අකාබිනික හෙහෙර නාමිකය ක්‍රමවත් විය.

1.6.1 -  $\frac{6}{6}$  බව

- 1.6.2 - \*
- \* ගැබුරට හි ඇම
  - \* ගුණකමක බිත්තර හි නාමිකයට හෙලවීම.
  - \* කන්ත දෙකක් අනර කොළ හෙහෙර වගාව.
  - \* හෙය්පො කොමිහේසිවි නිමිපාදකයට හෙලවීම.
  - \* අපතේ යන ගෙම ක්‍රමවත්ව නිකා කිරීම.
  - \* කොළ හෙහෙර ලබා ගැනීමට ජීවි වට ඇවීම.
  - \* අන්කරය බුසල් 140 වැඩි අභිවෘත්තත් ලබා ගැනීමට නිර්දේශිත රසායනික හෙහෙර නිර්දේශයට යොමු වීම.

1.7.1 - ක්ෂේත්‍ර නිලධාරීන් වගයන් අන්තේ අරමුණද ගොවිතමේ අදායම ඊහල නංවීම වන හෙයින් ව්‍යාපාරිකයේ පරමාර්ථ සමග අපද නිකා වෙමු.

2.1.1 - නියමිත අවස්ථාවලදී ඉවහරය යෙදවුම් හා සම්පත් ලබා දීමට ප්‍රමාද වීම.

\* පස් සාම්පල් පරීක්ෂා කර ප්‍රතිඵල ප්‍රමාද වීම

\* භෞමික සහකාරයාගේ වැඩ පිළිවෙල යටතේ උසස්කාරීකා භෞමික සහකාරයාගේ ප්‍රමාදයට, වේලාවට ගොටු වීම. (පස් පරීක්ෂණ ප්‍රතිඵලය)

කාර්යය භෞමික සහකාරයා වෙතුවෙන් මුදල් ගෙවීම නිසා ගෙවීම් ලාභය වී තාවකාලික භෞමික සහකාරයා කිරීම.

2.2.1 -  $\frac{b}{b}$  බව

2.2.2 -  $\frac{b}{b}$  සාර්ථකයි.

2.3.4 - IPNS විවිධවූ මූලික දත්ත ලබා ගැනීමට ගැටළු සහිත ස්ථාන නිවැරදි කළොත්ම ලබා ගැනීමට හැකිවීම නිසා උපායමාර්ගයක් සලකා බැලිය යුතුය.

බව.

2.4.1 -  $\frac{b}{b}$  බව

3.1.1 - ප්‍රමාදයක්

3.2.1 - නැත



4.1.1 -  $\frac{6}{6}$  രീതി

4.1.2 - വാക്യങ്ങളെ പ്രയോജനപ്പെടുത്തുന്ന രീതി.

4.2.1 - അക്ഷര

4.2.2 - അക്ഷര

4.3.1 - അക്ഷര.

4.4.1 - ~~അക്ഷര~~.

മുഴുവൻ അക്ഷര

5.1.1 - വ്യക്തികൾക്ക് - രീതി  
                  പ്രയോജനങ്ങൾ - രീതി  
                  അക്ഷരങ്ങൾ - അക്ഷര.

5.2.1 - അക്ഷര

5.3.1 - രീതി

\* അക്ഷരങ്ങളെ ക്രമമായി വായിക്കുന്ന രീതി

\* അക്ഷരങ്ങളിലെ ഏകദേശം ഉണ്ടാകുന്ന തിന്മകളെ കുറിച്ച് വിവരങ്ങൾ ലഭിക്കുന്ന രീതി.

\* എഴുതുന്നതിൽ പ്രയോജനപ്പെടുത്തുന്ന രീതി.

6.1.1 -  $\frac{6}{6}$  രീതി

6.1.2 - 20% - 25% വരെ വളർച്ച.

6.2.1 -  $\frac{6}{6}$  രീതി.

6.3.1 -  $\frac{6}{6}$  രീതി, മനോഹരമായ - പരിശോധനയ്ക്ക് അനുയോജ്യമായ രീതി.

7.1.1 - 10 වර්ෂ.

7.2.1 - බිම්

7.2.2 - දුක්කර 1 ආදර්ශය (උපරිම අස්වනු) පාලනය කිරීම සඳහා ක්ෂේත්‍ර දින පවත්වීම.

කාර්මික පොහොර නිෂ්පාදන වැඩසටහන් ක්‍රියාත්මක කිරීම.  
රසායන පොහොර නිෂ්පාදන වැඩසටහන්

- ගුණිතය වගා වැඩසටහන් (රෙණ වැට)
- සාපේක්ෂව ජීව ලබා දීම.

7.3.1 - බිම්

7.3.2 - මාසිකව වාර්ෂික ලබා ගැනීම.

ක්ෂේත්‍ර අධීක්ෂණ කටයුතු

නිරන්තර විවේචන

නිලධාරී පුහුණු වැඩසටහන්

7.4.1 - බිම්

7.4.2 - දුක්කර 01 උපරිම අස්වනු ආදර්ශය පවත්වීම.

ක්ෂේත්‍ර දින පවත්වීම.

කාර්මික පොහොර නිෂ්පාදන වැඩසටහන් ක්‍රියාත්මක කිරීම.

රසායන පොහොර නිෂ්පාදන වැඩසටහන්

- ගුණිතය වගා වැඩසටහන් (රෙණ වැට)
- සාපේක්ෂව ජීව ලබා දීම.

7.5.1 - බලාපොරොත්තුවෙන් සිටිමි.

නිවැරදිව වූ නිලධාරීන්

- |                        |                             |
|------------------------|-----------------------------|
| 1. දිනේක විමර්ශන විය.  | 4. සිතාත් බලාපොරොත්තුව විය. |
| 2. නවුන් විමර්ශන වේදිය | 5. මෙහිලා මුද්දාත්ත විය     |
| 3. රසායන පොහොර විය     | 6. ස්වර්ණය කුමාරි විය.      |

1.1.1 - පාලන. මුදල් 06

1.1.2 - බඩ - 06

1.1.3 - බඩ - 06

1.1.4 - පාලන - 06 (සමස්ත මුදල් ප්‍රතිපත්ති පිළිබඳව පාලන මාර්ගෝපදේශය.)

1.2.1 - බඩ - 06

1.2.2 - බඩ - 06

1.2.3 - ප්‍රවේශ පුස්තක - 06

මෙහි ප්‍රති - 06

පුස්තක ප්‍රවේශ - 05

විකුණා ගිය - 06

විකුණා ගිය මාර්ගෝපදේශ පුස්තක ප්‍රවේශ - 03 (විකුණා ගිය පුස්තක මාර්ගෝපදේශය.)

විකුණා ගිය මාර්ගෝපදේශ පුස්තක - 06

1.3.1 - පාලන ප්‍රතිපත්ති මාර්ගෝපදේශ. පාලන ප්‍රතිපත්ති පිළිබඳව පාලන මාර්ගෝපදේශය.

1.3.2 - පාලන ප්‍රතිපත්ති පිළිබඳව පාලන මාර්ගෝපදේශය - 15-20 කොටස් වශයෙන්. මෙහි මාර්ගෝපදේශ මාර්ග 05-10 ක් පමණි.

1.4 -

1.4.1 - බඩ.

1.4.2 - බඩ මාර්ගෝපදේශ පුස්තක ප්‍රවේශ 15-20 (මෙහි 4)

" " " " 40 (මෙහි 1)

" " " " 05-10 (මෙහි 1)

1.5.1 - පාලන මාර්ගෝපදේශ පුස්තක ප්‍රවේශ - මෙහි 06

විකුණා ගිය මාර්ගෝපදේශ පුස්තක ප්‍රවේශ (පුස්තක) ප්‍රවේශ - 03

1.5.2 - පුස්තක 10-15 කොටස් ප්‍රවේශ. - මෙහි 03

1.6.1 - කාර්යයන් පුළුල් කිරීමේදී ප්‍රධානීන් විද්‍යාත්මකව සහය දීම.

# 1.6.2 - සුදුසුකම් ලබාදීමේදී විද්‍යාත්මකව සහය දීම.

1.7.1 - IPNS වලට සහය, මහා ප්‍රාදේශීය විද්‍යාලයේ සහය සැලසුම් සකස් කිරීම. මෙම IPNS වලට සහය සැලසීම සම්බන්ධව. - 06.

විද්‍යාත්මක සහය සැලසුම්

2.1.1 - මෙම IPNS විද්‍යාත්මක පදනම ප්‍රධානීන් විද්‍යාත්මකව සහය දීම සඳහා සහය සැලසීම සම්බන්ධව. මෙම IPNS වලට සහය සැලසීම සම්බන්ධව. 20-25 ක් පමණ සහය සැලසීම සම්බන්ධව. - 06

2.2.1 - මෙම - සහය 6

2.2.2 - පුළුල් කිරීමේදී සහය සැලසීම - සහය 6

2.3.1 - මෙම ප්‍රධානීන් සහය. සහය 6

2.4.1 - මෙම - සහය 6.

විද්‍යාත්මක සහය සැලසීම සම්බන්ධව. මෙම ප්‍රධානීන් සහය සැලසීම සම්බන්ධව. විද්‍යාත්මකව සහය දීම, විද්‍යාත්මකව සහය දීම.

විද්‍යාත්මක

3.1.1 - විද්‍යාත්මකව සහය සැලසීම. මෙම ප්‍රධානීන් සහය සැලසීම සම්බන්ධව. - සහය 6

3.2.1 - මෙම - සහය 6

4.1.1 - මෙම - සහය 6

4.1.2 - විද්‍යාත්මකව සහය සැලසීම - සහය 6 192

4.2.1 - ശ്രീ ശ്രീ ശ്രീ

4.2.2 - -

4.3.1 - മി

4.4.1 - സാഹിത്യ സമാഹരണ വിഭാഗം  
സാഹിത്യ സമാഹരണ - പേജ് 6

5.1.1 - സാഹിത്യ പ്രകാശന ശ്രീ ശ്രീ ശ്രീ - പേജ് 6

5.2.1 - സാഹിത്യ സമാഹരണ വിഭാഗം

5.3.1 - സാഹിത്യ സമാഹരണ വിഭാഗം - \*  
സാഹിത്യ സമാഹരണ

6.1.1 - മി - IPKLL സാഹിത്യ സമാഹരണ - പേജ് 6

6.1.2 - സാഹിത്യ സമാഹരണ വിഭാഗം

6.2.1 - മി - പേജ് 6

6.3.1 - സാഹിത്യ സമാഹരണ വിഭാഗം

7.1.1 - . സാഹിത്യ സമാഹരണ വിഭാഗം  
. സാഹിത്യ സമാഹരണ വിഭാഗം / സാഹിത്യ സമാഹരണ വിഭാഗം

7.1.2 - മി -

7.2.2 - സാഹിത്യ സമാഹരണ വിഭാഗം  
സാഹിത്യ സമാഹരണ വിഭാഗം

7.3.1 - മി

7.3.2 - സാഹിത്യ സമാഹരണ വിഭാഗം  
സാഹിത്യ സമാഹരണ വിഭാഗം 193





## Effectiveness

4:1:1 - yes.

4:1:2 - quality / trainers are very good.

4:2:1 - not relevant.  
not given paddy hush burners.

4:2:1 - No

4:3:1 - yes.

## Efficiency

5:1:1 - yes.

5:2:1 - yes. - appropriate.

5:3:1 - No.

## Impact

6:1:1 - yes.

~~6:1:2~~ - Increase the income  
14,000 Rs/ = ~~AC~~.

6:2:1 - yes.

6:3:1 - positive impact.

20	28
28	20
560	
28	



# Sustainability

(3)

7:1:1 - ~~10 at ADA~~ about 10 examples.

7:2:1 - yes.

7:2:2 - ~~A~~ continuously support vision of the field level (knowledge) ~~was~~  
- distribute of sunhemp seeds among farmers.  
- held training classes & field days.

7:3:1 - yes.

7:3:2 - Field super vision of the A2 ranges under the Goujiana Sewa range (super vision ~~of~~ of ADA's ~~in~~ district office & the SMO - Paddy.)

<sup>held on</sup>  
- 1 AC maximum demonstration  
yaya among the yaya level.

7:4:1 - yes.

7:4:2 - ~~to~~ continuously give the technical support by the A2(I)

7:5:1 - NO.

2009/2/20 ハンバントタ (プロビンシャル) 地区

13/02/2009

Mr. C.Nanayakkara  
Deputy Director  
Provincial Department of Agriculture - SP  
Hambantota

Dear Sir

**TERMINAL EVALUATION OF THE JICA IPNS PROJECT**

As per the telephone conversation we had with you on 11<sup>th</sup> and 13<sup>th</sup> February 2009, we would like to confirm the following schedule as agreed.

**Objective of the meeting and the visit:**

To collect information and the feedback of the stakeholders and the beneficiaries of IPNS Project to evaluate relevance, effectiveness, efficiency, impact and sustainability of the Project.

**Date:** 20<sup>th</sup> February 2009

**Place of the meeting :** Provincial Director's office - Hambantota

**Time:** 10.00 A.M. to 12.30 P.M.

**Participants: (please make necessary arrangement)**

1. Director/Asst. Director
2. Deputy Director
3. 5 Agricultural Instructors (AI) and other field level Officers (Randomly selected officers who have participated in IPNS Project)
4. 10 farmers (Randomly selected farmers who have participated in IPNS Project)

Your kind cooperation in this regard is highly appreciated.

Thank you,  
Yours Sincerely

.....  
Junichiro Yamada  
IPNS Project Evaluation Team Leader  
Adviser for Agriculture, Irrigation and Rural Development  
JICA Expert

CC: Mr. Ranjan Dharmawaradana, Director, National Fertilizer Secretariat, MAD & AS  
Dr. W.M.A.D.W. Wickramasinghe, National Coordinator of IPNS Project  
Dr. Nimal Dissanayake, Director, Rice Research & Development Institute, DOA  
Dr. J.P. Atapattu, Assistant Director, Fertilizer Unit, Department of Agriculture  
Mr. Yuasa, Dr. Punchibanda, JICA Sri Lanka Office

20/02/2007  
10.00 A.M

Netolpitiya GoviSana Centre.

Terminal Evaluation  
FIELD LEVEL MEETING  
ATTENDANCE

Hambantota.  
(Provincial)

No	Name of the participant	Designation and place	Signature
01	Atula Rajapaksa.	AI. Udayala	
02	R.G. Bandaranayake.	AI. Attanayala.	
03	S. Mahanama.	AI. Karumudeniya	
04	M.G. Buddhadasa.	AI. Galagama.	
F 05	K.R. Ariya Chandra.	168, Dickwella rd. Beliatta.	
F 06	M.L. Piya dasa.	Nellikata Karatuwa - Gadakumbura.	
07	G.B. Sriyani.	AI, Vitharandeniya.	
F 08	K.W. Abeygunawardhana.	Weda gedara, Vitharandeniya	
09	K.K. Dhayaseena	AI - Kattakaduwa.	
F 10	M.H. Piya sena	Labeema Watta, Vitharandeniya	
F 11	E.M. Nimal.	Angunakola Pellessa.	
12	Jagath Shantha Warnakula	Officer in charge. (Hemik.)	
13	H.A. Piya sena.	AI - Netolpitiya.	
14	H.A. Upali	AI. - Badagiriya	
15	C. Nanayakkara	DDA - Hambantota.	
16	S.K.N. Rubasinghe	ADA - Hambantota.	
17			
18			
19			
20			
21			
22			
23			
24			
25			

Terminal Evaluation  
FIELD LEVEL MEETING

20/02/2009

10.00 A.M

Prasenjal -

ATTENDANCE

නවීන්ගොඩ.

No	Name of the participant	Designation and place	Signature
01	අනුල රාජවංශ.	නාගර් හා ගම්පහ - ප්‍රධාන	අනුල රාජවංශ
02	R. G. බණ්ඩාරගම	කොළඹ විශ්වවිද්‍යාලය - අධ්‍යක්ෂ	Ranjith
03	එස්. ඔහරානා	කොළඹ විශ්වවිද්‍යාලය	S. Anura
04	M. G. වික්‍රමරත්න	කොළඹ විශ්වවිද්‍යාලය - පාඨශාලා	M. G. V.
05	කේ. ආර්. සුමරසේන	168. විශ්වවිද්‍යාලය	K. A. S.
06	කේ. එම්. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	K. M. J.
07	කේ. ඩී. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	K. D. J.
08	කේ. එම්. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	K. M. J.
09	K. K. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	K. K. J.
10	කේ. එම්. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	K. M. J.
11	E. M. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	E. M. J.
12	කේ. එම්. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	K. M. J.
13	කේ. එම්. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	K. M. J.
14	H. M. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	H. M. J.
15	කේ. එම්. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	K. M. J.
16	S. K. N. ජයරත්න	කොළඹ විශ්වවිද්‍යාලය	S. K. N. J.
17			
18			
19			
20			
21			
22			
23			
24			
25			





2.1.1 - අනුලෝමයෙන්. පුරාණ සා, ආ සලකාකරණය -  
සහිත දියුණුවට පුළුල්.

2.2.1 - සාහසිකව,

2.2.2 - ප්‍රධාන අවස්ථාවේ ප්‍රායෝගික ප්‍රයත්නවල ප්‍රධානතාවය  
සාපේක්ෂව.

2.3.1 - ප්‍රධානව ආ ප්‍රායෝගිකව පුළුල්.

- සා.

2.4.1 - සා.

3.1.1 - ප්‍රධානතාව.

3.2.1 - ප්‍රධාන.

- ~~සා~~

4.1.1 - ප්‍රධාන.

4.1.2 - සාපේක්ෂව ප්‍රධානව සාහසිකව,

4.2.1 - සාපේක්ෂව ප්‍රධානව ප්‍රධානව.

4.2.2 - සාපේක්ෂව ප්‍රධානව ප්‍රධානව.

4.3.1 - සාහසිකව ප්‍රධානව, සා. සලකාකරණයට ප්‍රධානව.

4.4.1 - සා.



5.1.1. ഘോഷി അല്ലെങ്കിൽ മറ്റേ ഏതെങ്കിലും മറ്റേ നിലയിൽ, ജനകീയതയോടുകൂടി.

5.2.1. - ഉപജാപനം നൽകും.

5.3.1. - ഉപജാപനം - ഉപജാപനം ഉപജാപനം നൽകും, ഘോഷി - അല്ലെങ്കിൽ മറ്റേ നിലയിൽ, മറ്റേ നിലയിൽ ജനകീയതയോടുകൂടി.

6.1.1. - അ.

6.1.2. - 15% ന്റെ വരവ്.

6.2.1. - അ.

6.3.1. - മനോഹരമായ സൗകര്യം.

7.1.1. \* ജനകീയതയോടുകൂടി മറ്റേ നിലയിൽ ഉപജാപനം നൽകും.

\* ഉപജാപനം നൽകുന്നതോടുകൂടി.

\* ഉപജാപനം നൽകുന്നതോടുകൂടി നൽകുന്നതോടുകൂടി - മറ്റേ നിലയിൽ.

\* ജനകീയതയോടുകൂടി മറ്റേ നിലയിൽ.

7.2.1. - ഉപജാപനം നൽകുന്നതോടുകൂടി മറ്റേ നിലയിൽ.

7.2.2. - \* ഉപജാപനം നൽകുന്നതോടുകൂടി

\* ജനകീയതയോടുകൂടി

\* ഉപജാപനം നൽകുന്നതോടുകൂടി 207.

7.3.1. - ~~അൻ~~ ~~ഇൻ~~ ~~പിൻ~~ ~~പിൻ~~.

7.3.2 - ~~ഇൻ~~ ~~അൻ~~.

7.4.1 - ~~ഇൻ~~.

7.4.2 - 7.2.2 ~~ഇൻ~~ ~~അൻ~~ ~~പിൻ~~.

7.5.1 - ~~അൻ~~.

(FARMERS) പത്തൊമ്പതാം നൂറ്റാണ്ടിലെ തെക്കേന്ത്യയിലെ കർഷകരുടെ ജീവിതം പറ്റി പഠിക്കാനുള്ള പുസ്തകം. കർഷകരുടെ.

(1) 1.1 മുതൽ 1.1.2 വരെ.

മറ്റും പറ്റിയും.

പത്തൊമ്പതാം നൂറ്റാണ്ടിലെ തെക്കേന്ത്യയിലെ കർഷകരുടെ ജീവിതം പറ്റി പഠിക്കാനുള്ള പുസ്തകം. കർഷകരുടെ.

1.1.2 മുതൽ 1.1.3 വരെ

1.1.3 മുതൽ 1.1.4 വരെ

1.1.4 മുതൽ 1.2.1 വരെ

1.2.1 മുതൽ 1.2.2 വരെ

1.2.2 18

1.2.3 കർഷകരുടെ ജീവിതം, തെക്കേന്ത്യയിലെ, തെക്കേന്ത്യയിലെ, കർഷകരുടെ, തെക്കേന്ത്യയിലെ ജീവിതം. കർഷകരുടെ ജീവിതം, തെക്കേന്ത്യയിലെ, തെക്കേന്ത്യയിലെ, തെക്കേന്ത്യയിലെ ജീവിതം. തെക്കേന്ത്യയിലെ ജീവിതം, തെക്കേന്ത്യയിലെ. കർഷകരുടെ ജീവിതം. തെക്കേന്ത്യയിലെ ജീവിതം ( കർഷകരുടെ ജീവിതം 2.1.2 )

31 മുതൽ

32 കർഷകരുടെ ജീവിതം 20 - 35

41 മുതൽ

42 കർഷകരുടെ ജീവിതം 20 - 35





71.1 ചർക്കിളി ചിരമുഖം, ക്ഷീരമുഖി ജനസംഖ്യ ക്ഷീരമുഖം, ഏകദേശം 2000  
2000 വരെ ഏകദേശം ക്ഷീരമുഖം.

72.1 ———

72.2 ———

73.1 ———

73.2 ———

74.1 ———

75.1 ക്ഷീരമുഖി ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം  
ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം  
ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം ക്ഷീരമുഖം



2009/2/20 ハンバントタ (インタープロビンシャル) 地区



13/02/2009

Mr. Hiran Peiris  
Asst. Director  
Inter-Provincial Department of Agriculture - SP  
Hambantota

Dear Sir

**TERMINAL EVALUATION OF THE JICA IPNS PROJECT**

As per the telephone conversation we had with you on 11<sup>th</sup> and 13<sup>th</sup> February 2009, we would like to confirm the following schedule as agreed.

**Objective of the meeting and the visit:**

To collect information and the feedback of the stakeholders and the beneficiaries of IPNS Project to evaluate relevance, effectiveness, efficiency, impact and sustainability of the Project.

**Date:** 20<sup>th</sup> February 2009

**Place of the meeting :** Inter-Provincial Director's office - Hambantota

**Time:** 02.00 P.M. to 4.00 P.M.

**Participants: (please make necessary arrangement)**

1. Director/Asst. Director
2. Deputy Director
3. 5 Agricultural Instructors (AI) and other field level Officers (Randomly selected officers who have participated in IPNS Project)
4. 10 farmers (Randomly selected farmers who have participated in IPNS Project)

Your kind cooperation in this regard is highly appreciated.

Thank you,  
Yours Sincerely

.....  
Junichiro Yamada  
IPNS Project Evaluation Team Leader  
Adviser for Agriculture, Irrigation and Rural Development  
JICA Expert

CC: Mr. Ranjan Dharmawaradana, Director, National Fertilizer Secretariat, MAD & AS  
Dr. W.M.A.D.W. Wickramasinghe, National Coordinator of IPNS Project  
Dr. Nimal Dissanayake, Director, Rice Research & Development Institute, DOA  
Dr. J.P. Atapattu, Assistant Director, Fertilizer Unit, Department of Agriculture  
Mr. Yuasa, Dr. Punchibanda, JICA Sri Lanka Office

20/02/2009

2.00 P.M.

IP office - Hambantota

Terminal Evaluation  
FIELD LEVEL MEETING  
ATTENDANCE

Hambantota.

No	Name of the participant	Designation and place	Signature
01	E. Ratnasiri	Ag. Monitoring office, IP office	
02	S. V. S. U. Prabath	AI, Lunama	
03	C. K. B. Palugaswewa	AI, Weerawila	
04	S. L. A. Sudharshamee	AI, Semumunna	
05	W. G. Anoma	AI (OIC) Ambalantota	
06	W. D. Malinee	AI (OIC) Badagiriya	
07	W. E. Bandara Wasantha	AI - ADA office - Hambantota	
08	K. K. D. Kadangoda	Ag. Monitoring office ADA office	
09	<del>C.H.</del> Chandana Wanniarachchi	AI, Gonagamawa	
10	M. B. Weerasinghe	ADA - Kirindiya, DD office H/total	
11	N. M. A. Dharma Priya	ADA, Walawa, AD office - Ambalantota	
F 12	W. A. Wijedasa	No: 673, - K.G. 03	
F 13	S. A. Sangadasa	No: 108 " 03	
F 14	C. M. Chandrasasa	Koggalla	
F 15	G. Wimalaguna	K.G. 11, E.A. 18A	
F 16	S. H. Siripala	K.G. 11, No: 05	
F 17	W. P. Somasiri	Bolakopu pathana - Tissu	
F 18	K. M. Justin	Badagiriya, No: 03	
F 19	R. P. Weelakena	Piniella	
F 20	S. P. Ariyapala	Kuda Bolana	
F 21	S. A. P. Ananda	Ridegama Paragathi - Chamman	
F 22	K. P. T. E. Jayasekara	Saruketha govi samithiya	
23	W. L. Huran Peris	DD.A. - Hambantota (IP)	
24			
25			

Integrated Plant Nutrition System Programme

Terminal Evaluation  
FIELD LEVEL MEETING

ATTENDANCE

(සමීක්ෂණය)

නැවතුණ දිනය - 20/02/09

No	Name of the participant	Designation and place	Signature
01	ඊ.එස්.එස්. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
02	J.V.S.U. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
03	ඊ.එස්.එස්. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
04	J.L.A. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
05	W.G. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
06	H.D. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
07	W.C. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
08	K.K.D. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
09	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
10	M.B. Weerasuriya	ADA (Kirindioya) - Office Hambantota	ඊ.එස්.එස්.
11	N.M.A. Dharmapriya	ADA (Walaawa) - Office Ambatogoda	ඊ.එස්.එස්.
12	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
13	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
14	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
15	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
16	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
17	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
18	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
19	E.P. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
20	S.P. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
21	S.A.P. ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
22	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
23	ජනරාල්	කොළඹ විශ්වවිද්‍යාලය	ඊ.එස්.එස්.
24			
25			

කර්තව්‍ය - 7 (ක.ප.)

(1P.)

15)

1.1. කිසිදු දේහයේ දිගමන නිසා  $\frac{7}{7}$

1.2. බර  $\frac{7}{7}$

1.3. බර  $\frac{7}{7}$

1.4. බර  $\frac{7}{7}$

1.2: 1 - බැ.

1.3: 1 නැවතත් පුළු වෙනස් කිරීම හේතු.

1.3: 2 කොළ මද ප්‍රති, ප්‍රතිකාම වෙනුවට පැමිණිමත් සමහරේ මඳි ගැනීමට හිටු වේ මේ වෙනස් කර.

1.4: 1 අවම වශයෙන් හිටු කර ගැනීම. මුද්‍රිතයේදී නිසි තෙරේ.

1.4: 2 අවම වශයෙන් අධුර දිගමන ගැන.  $\frac{7}{7}$

1.5: 1 බර  $\frac{7}{7}$

1.5: 2 කාරණය පුළු වෙනුවට දිගට නොගනී. කුර්තනි මුළු දිග නිසා, 10% කින් අවම දිගයට පැහැර වැඩි විය හැක.  $\frac{7}{7}$

1.6: 1 බර  $\frac{7}{7}$

1.6: 2. අධුර කිරීමට පිටතට පිට. අධුර ම. නි. මුද්‍රිතයේ අවම වශයෙන් වෙනස් කර. දිගයට අධුර අවම වශයෙන් වෙනස් කර.  $\frac{7}{7}$

1.7: 1 බර  $\frac{7}{7}$  (අවම වශයෙන් වේ හැරීමට නොහැකිවේ.)

2: 1: 1 යෙදවීම නිසා වෙනුවට නොලැබේ. අධුර වශයෙන් නිසි කලට හිටු නොගනී. කෙසේ වෙතත් නිසි වශයෙන් කෙසේ වෙතත් අධුර නිසා. අධුර නිසා නිසි කලට වැඩි වීමට නොහැකිවේ.  $\frac{7}{7}$

2: 2: 1 නැවතත් මඳි.

2: 2: 2 නැවතත් මුද්‍රිතයට අවම වශයෙන්. 218

2:3:1 - രണ്ട്  $\frac{7}{7}$

2:4:1 - രണ്ട്  $\frac{7}{7}$

3:1:1 - പ്രയാസം

3:2:1 - ഗതാഗതം നിലനിർത്തുക.

4:1:1 - ജനങ്ങൾ  $\frac{7}{7}$

4:1:2 - പ്രസ്തുത രാജ്യത്തിന്റെ കർമ്മങ്ങൾ പരിശോധിക്കുക. ജനങ്ങൾക്കും പ്രയോജനപ്പെടുത്തേണ്ട കാര്യം, കേന്ദ്രം നന്നായി നോക്കേണ്ടതാണ്.

4:2:1 - EPNS യഥാർത്ഥം നോക്കുക.

4:2:2 - പ്രസ്തുത രാജ്യത്തിന്റെ ഉദ്ദേശ്യം നോക്കി പരിശോധിക്കുക.  $\frac{7}{7}$  നോക്കുക.

4:3:1 - രണ്ട്  $\frac{7}{7}$  (മാതൃകാ രാജ്യങ്ങൾ, കർമ്മങ്ങൾ നോക്കി പരിശോധിക്കുക.)

4:4:1 - രണ്ട്. രാജ്യങ്ങൾക്കും ജനങ്ങൾക്കും ഉപയോഗപ്പെടുത്തേണ്ട കാര്യം നോക്കുക.

5:4:1 - ~~കേന്ദ്രം~~ - കേന്ദ്രം നോക്കുക.  
പേരുകൾ - കർമ്മങ്ങൾ നോക്കുക (നോക്കുക)

5:2:1 - പ്രയാസം.

5:3:1 - രണ്ട്. കർമ്മങ്ങൾക്കും ജനങ്ങൾക്കും ഉപയോഗപ്പെടുത്തേണ്ട കാര്യം നോക്കുക.

6:1:1 - വ്യക്തികൾക്ക് കർമ്മങ്ങൾ നോക്കുക.

6:1:2 - വ്യക്തികൾക്ക് കർമ്മങ്ങൾ നോക്കുക.

6:2:1 - രണ്ട്  $\frac{7}{7}$

6:3:1 - മാതൃകാ രാജ്യങ്ങൾ നോക്കുക.

7:1:1 - കർമ്മങ്ങൾക്കും ജനങ്ങൾക്കും ഉപയോഗപ്പെടുത്തേണ്ട കാര്യം നോക്കുക.

7:2:1 බව

7:2:2 IPNS නොවන හොඳින් ඇතුළත් කිරීම. ප්‍රතිරෝධී

7:3:1 IPNS වැඩිපරිමාණයට ගොඩ නගීම.

7:3:2 වැඩිපරිමාණයට වැඩි කාර්යක්ෂමතාවය.  
වැඩිපරිමාණයට වැඩි කාර්යක්ෂමතාවය, ලබා ගැනීම.

7:4:1 බව.

7:4:2 වැඩිපරිමාණයට වැඩි කාර්යක්ෂමතාවය.

7:5:1 ලැබීම.

ඉහත සඳහන් කළ කාර්යයන් සඳහා වැඩි කාර්යක්ෂමතාවය ලබා ගැනීම සඳහා  
වැඩි කාර්යක්ෂමතාවය ලබා ගැනීම සඳහා වැඩි කාර්යක්ෂමතාවය.

\* ඉහත සඳහන් කළ කාර්යයන් සඳහා වැඩි කාර්යක්ෂමතාවය ලබා ගැනීම සඳහා  
වැඩි කාර්යක්ෂමතාවය ලබා ගැනීම සඳහා වැඩි කාර්යක්ෂමතාවය.

~~Handwritten scribbles~~  
03/05/2009

1.1 පස්දෙනාට ප්‍රවේශය  
තනතුරු ප්‍රදේශන වර්ග

(Farmers.)  
Hambantota (IP)

FARMERS)

2 පස්දෙනාට  
ඔවුන්

3 පස්දෙනාට  
ඔවුන්

4 පස්දෙනාට  
ඔවුන්

2.1 පස්දෙනාට  
ඔවුන්

1 2-2 පස්දෙනාට  
ඔවුන්

1 2.3 1/6 කොටසකට පස් පරිභෝජනයට අනුරූප  
පොහොසත් බවට පත්වීමට තත්වයන්

2 නාවික පොහොසත් බවට පත්වීමට (අත්පොතිලි,  
විදුලි, ගෙඩි, දහඩිය අරුණ, අමුණාලයන්,

1 3.1 -- පස්දෙනාට -- ඔවුන්

1 3.2 - 25%

1 4.1 පස්දෙනාට - ඔවුන්

1 4.2 වි. ක්‍රමයේ 500 - 600 අතර ප්‍රවේශයන් අන්තර් 0.1  
පස්දෙනාගේ වැඩිවිය

1 5.1 ඔවුන්

5.2 අනාවරණය අනුරූප - නාවික වැඩිවීම

6-1 අතර 0.1 ට ඉහල පොහොසත් - 5 දෙනාට.

n n දිනක ඉහල 250kg - 5 දෙනාට.

n n පොහොසත් ඉහල 40 - 3 දෙනාට

1.6.1 ඔව් එක් පුද් කාලයක් පොරොන්දු වශයෙන්  
සෙලව

1.7.1 500 ඉතාලියේ පරිපාලන ව්‍යුහය -

2.1.1 වෙලාවට 200 ක් පමණ <sup>පොරොන්</sup> ලියාපදිංචි පොරොන් කිරීම  
3 දෙනෙකු

2 කොටස ලැබීම

2.2.1 කාන්ත පොරොන් සෙලවීම වීම වීම  
දුරකථන මගින් පොරොන්

2.2.1 ඔව්

2.2.2 වඩා වැඩි විය.

2.3.1 ව්‍යාපාර ව්‍යුහය ව්‍යාපාරයක් කිරීම

2.4.1 ඔව්

3.1.1 ලිපිනය

3.2.1 ලොකු පොරොන් පොරොන් කිරීම  
එක් ව්‍යාපාරයක් පොරොන්

4.1.1 ඔව්

4.1.2 ව්‍යාපාර පොරොන්

4.2.1 පාලන පොරොන්



4-2.2 ගාලු ගෙවීම් කටයුතු (3)

4 3 1 පනවනු ලැබූ  
විකුණුම් කටයුතු

4 4 1 වටු  
කාලීන ගොවිතමය මධ්‍යස්ථ පාසල  
වල වටු, කටු, කටු වල ගොවිතමය පාසල  
වල

5.1.1 නගර. පනවනු ලැබූ  
විකුණුම් කටයුතු

5 2 1 වටු

5 3 1 කාලීන ගොවිතමය පාසල මධ්‍යස්ථ පාසල  
වල ගොවිතමය

6 1 1 වටු

6 1 2 12.500 වත්කමක්

6 2 1 වටු

6 3 1 වටු  
වත්කමක් වල, මධ්‍යස්ථ පාසල  
වල

7.1.1 5 වැනි.

7 5 1 වටු

ගොවිතමය ගොවිතමය පාසල  
වල වත්කමක් මධ්‍යස්ථ පාසල  
වල

1. I. ① :- නූත.

Hombakata (IP)  
(Farmers.)

2. II ② :- දැනුමක් ලබා ගනිමි.

1. i ③ :- විකේතනයක් ලබා ගනිමි.

1. i ④ :- අන් අය සමඟ දිගුව බෙදා ගනිමි.

1. 2. I :- බවි.

1. 2. 2 :- 16

1. 2. 3 :- සුභ කාර් කම්.

I කාව්‍යයේ පොතෙක් (හොට සුදු දිනයක් අළු කොට) ඇදී විභාජනය.

II සඳහා අවශ්‍ය නිර්දේශිත කොටසක් පොතෙක් සමස්ත (අවම ප්‍රමාණයක් සමස්ත)

III අවශ්‍ය කාලයට සමස්ත පොතක් ලබා ගනිමි.

IV වඩාත් සමහරක් පොතක් සඳහා ලබා ගනිමි. අංශ සඳහා ඉලක්ක දිනය දී සඳහා සමස්ත කාර්ම.

V ජල ප්‍රමාණය නිවැරදි කාර්ම කාර්ම.

1-3-1

විද්‍යාත්මක විද්‍යා පද්ධතිය  
සාමාන්‍ය වලට වඩා අඩු වීම.  
පො. 2006 වලින් පමණක් අග: 1 කී  
රු: 285/- ට පමණ මාසයක් අතර  
සාමාන්‍ය වශයෙන් පවා වැඩි වුවද  
අයදුම්පත් පවා වැඩි 2500/- විය

1-4-1

අත් වෘත්ත සාමාන්‍ය වීම.

1.5-1

වෙනස් වීමක් අඩු වී ඇත.

1.5-2

~~අග: 10 පමණ පමණ 2.~~  
අග: 10 පමණ පමණ 2.  
අග: 10 පමණ පමණ 2.  
අග: 10 පමණ පමණ 2.  
අග: 10 පමණ පමණ 2.

1-6-1

කිසි.

1-6-2

සාමාන්‍ය වශයෙන් අඩු වීම.

1.7-1

අඩු වීමක් හරහා වැඩි වූ ප්‍රතිඵලයක් ලැබේ.

2.1-1

සාමාන්‍ය වශයෙන් අඩු වීම.

2-2

අග: 10 පමණ පමණ 2.

2-2

පො. 2006 වලින් පමණක් අග: 1 කී

3.1

— පො. 2006 වලින් පමණක් අග: 1 කී

4.1

අග: 10 පමණ පමණ 2.

3-1-1 :- ഇക്ക് പ്രമാണങ്ങൾ ഉണ്ടാക്കിയ ശേഷം പ്രത്യേകം (3)

3. 2-1 :- ചുരുക്കം.

4. 1-1 :- ക്ലിപ്തം.

4. 1. 2 :- ശോഭ.

4. 2-1 :- ശോഭ. പരമ്പരയായ കലാരംഗം

4. 2-2 :- പരമ്പരയായ (കലാരംഗം) തന്റെ പരമ്പര  
ശോഭ ശോഭ.

4. 3-1 :-

4-4-1 :- ക്ലിപ്തം. (കലാരംഗം, ചിത്രശാല)

5-1-1 :- കലാരംഗം വേർതിരിച്ചുകൊടുക്കുന്ന പരമ്പര  
ക്ലിപ്തം.

5-2-1 :- ക്ലിപ്തം.

5-3-1 :- ക്ലിപ്തം. പരമ്പര ശോഭിക്കുന്നു. ചുരുക്കം  
ക്ലിപ്തം പ്രത്യേകം.

5-1-1 :- ക്ലിപ്തം.

5. 4. 2 :- ക്ലിപ്തം തന്റെ കലാരംഗം ചുരുക്കം. ചുരുക്കം  
ക്ലിപ്തം കലാരംഗം കലാരംഗം കലാരംഗം  
ക്ലിപ്തം ചുരുക്കം.

5. 2-1 :- ക്ലിപ്തം.

5. 3-1 :- ക്ലിപ്തം കലാരംഗം. കലാരംഗം കലാരംഗം  
ക്ലിപ്തം കലാരംഗം കലാരംഗം കലാരംഗം  
ക്ലിപ്തം കലാരംഗം കലാരംഗം കലാരംഗം

(4)

6-3-1 :- # 2000 වන අංකයේ 01 වන කොටස  
අධිකාරීන් දැනගැනීමේ පිණිස  
සාමාන්‍ය වශයෙන් යොදා ගැනීමට  
මෙහි

2009/2/27 アヌラダプラ (インタープロビンシャル) 地区

12<sup>th</sup>/02/2009

Mr. I.W.K.Imbulgoda  
Asst. Director  
Inter-Provincial Department of Agriculture - NCP  
Anuradhapura

Dear Sir

**TERMINAL EVALUATION OF THE JICA IPNS PROJECT**

As per the telephone conversation we had with you on 11<sup>th</sup> February 2009, we would like to confirm the following schedule as agreed.

**Objective of the meeting and the visit:**

To collect information and the feedback of the stakeholders and the beneficiaries of IPNS Project to evaluate relevance, effectiveness, efficiency, impact and sustainability of the Project.

**Date:** 27<sup>th</sup> February 2009

**Place of the meeting :** Inter-Provincial Director's office - Anuradhapura

**Time:** 10.00 A.M. to 12.30 P.M.

**Participants: (please make necessary arrangement)**

1. Director/Asst. Director
2. Deputy Director
3. 5 Agricultural Instructors (AI) and other field level Officers (Randomly selected officers who have participated in IPNS Project)
4. 10 farmers (Randomly selected farmers who have participated in IPNS Project)

Your kind cooperation in this regard is highly appreciated.

Thank you,  
Yours Sincerely

.....  
Junichiro Yamada  
IPNS Project Evaluation Team Leader  
Adviser for Agriculture, Irrigation and Rural Development  
JICA Expert

CC: Mr. Ranjan Dharmawaradana, Director, National Fertilizer Secretariat, MAD & AS  
Dr. W.M.A.D.W. Wickramasinghe, National Coordinator of IPNS Project  
Dr. J.P. Atapattu, Assistant Director, Fertilizer Unit, Department of Agriculture  
Mr. Yuasa, Dr. Punchibanda, JICA Sri Lanka Office

## Terminal Evaluation

## FIELD LEVEL MEETING

Inter Provincial .. 10.00.00 ATTENDANCE Anuradhapura.

No	Name of the participant	Designation and place	Signature
F 01	T. P. Nalinda	Kambewa.	
F 02	A. G. Wijerathne.	Kalenbindumuwewa.	
F 03	N. G. Ranjith Chandrasena - Halmilla kulama.		
F 04	H. P. D. Chandra wardhana.	Pawak kulama.	
F 05	S. T. Ranis	Suhadagama.	
F 06	W. A. Wijesinghe.	Shawasthipura.	
F 07	Jayathilake Wanigasooriya - L.D. 35. Kusumweli		
F 08	T. M. Ranjith Dissanayake.	Rajanganaya.	
AI 09	R. K. Adikaram	A.I. Rajanganaya (Left Bank)	
AI 10	S. L. W. C. Liyanage	AI. Shawasthipura	
AI 11	Nandane Mangalika.	AI. Hidogama.	
AI 12	W. M. W. S. Weerarekara.	AI. Diuluwewa.	
AI 13	S. M. D. B. Bandara.	AI. Rambewa.	
AI 14	M. R. Nihal Ajelk Kumara.	AI - Nuwarawewa.	
AI 15	K. P. D. K. S. Ranasinghe	AI - Kalenbindumuwewa.	
	D. M. Siddhasena.	ADA - Anuradhapura.	
AI 17	V. R. K. Dissanayake.	AI - Phudawewa.	
AI 18	A. W. M. Subasinghe.	AI - Rajangama (Right Bank)	
F 19	G. A. G. Sujewa Priyantha Kumara - Rajanganaya.		
	M. D. S. A. Chandraratna.	A. D. A. Anuradhapura.	
	T. W. K. Embulgodra.	A. D. A. (Head office) Mulla	
AI 22	H. D. S. Hathirasinghe.	AI - Head office	
F 23	R. M. Manasinghe	Rajangama - page 15 -	
24			
25			



Integrated Plant Nutrition System Programme

Terminal Evaluation

FIELD LEVEL MEETING

27/02/2009

INTER-PROVINCIAL - 10.00 AM ATTENDANCE

ANURADHAPURA

No	Name of the participant	Designation and place	Signature
01	Dr. S. M. M. M. M.	...	...
02	...	...	...
03	...	...	...
04	H.P.D. ...	...	...
05	S.C. ...	...	...
06	W.A. ...	...	...
07	...	...	...
08	T.M. ...	...	...
09	R.K. ...	...	...
10	S.L.W.C. ...	...	...
11	...	...	...
12	W.M.W.S. ...	...	...
13	S.M.B.D. ...	...	...
14	M.R. ...	...	...
15	K.P.D.K.S. ...	...	...
16	D.M. ...	...	...
17	V.R.K. ...	...	...
18	L.W.M. ...	...	...
19	G.A.G. ...	...	...
20	M.D.S.A. ...	...	...
21	I.W.K. ...	...	...
22	H.D.S. ...	...	...
23	R.N. ...	...	...
24			
25			

IPNS - Final Evaluation -  
 Director's Office -

1st group.  
 Anurodha Purva: 10.00 : 11.00  
 (IP)

1:1:1 ରହି  $\frac{4}{4}$

ପ୍ରୋଡକ୍ସନର ଉପର ପ୍ରଦର୍ଶନ

(AIs)

1:1:2 ରହି  $\frac{4}{4}$

1:1:3 ରହି  $\frac{4}{4}$

1:1:4 ରହି  $\frac{4}{4}$

IPNS

1:3:1 ରହି  $\frac{4}{4}$

- 1:3:2 \* IPNS ରେଡ ଗ୍ରୋଥର ସମ୍ପର୍କ କରାଯାଇଥିବା ସମ୍ପର୍କର ମୂଲ୍ୟାଙ୍କନ କରାଯାଇଥିବା ସମ୍ପର୍କର ମୂଲ୍ୟାଙ୍କନ
- \* ସମସ୍ତ ଉତ୍ପାଦନ ସାଧନର ଉପରେ ଆଧାର ରଖି ଉତ୍ପାଦନର ମୂଲ୍ୟାଙ୍କନ କରାଯାଇଥିବା ସମ୍ପର୍କର ମୂଲ୍ୟାଙ୍କନ
- \* ଆବଶ୍ୟକ ସାଧନର ମୂଲ୍ୟାଙ୍କନ କରାଯାଇଥିବା ସମ୍ପର୍କର ମୂଲ୍ୟାଙ୍କନ
- \* ଆବଶ୍ୟକ ସାଧନର ମୂଲ୍ୟାଙ୍କନ କରାଯାଇଥିବା ସମ୍ପର୍କର ମୂଲ୍ୟାଙ୍କନ

∴ ସମସ୍ତ ଉତ୍ପାଦନର ମୂଲ୍ୟ  $20 \times 30.00 = 600.00$   
 ଉତ୍ପାଦନର ମୂଲ୍ୟ  $20.5 \times 30.00 = 615.00$

ଆବଶ୍ୟକ ସାଧନର ମୂଲ୍ୟାଙ୍କନ କରାଯାଇଥିବା ସମ୍ପର୍କର ମୂଲ୍ୟାଙ୍କନ କରାଯାଇଥିବା ସମ୍ପର୍କର ମୂଲ୍ୟାଙ୍କନ

1: 4: 1 ~~മുഖ്യ~~ വർ  $\frac{4}{4}$

1: 4: 2 ഉപരി 20

1: 5: 1 വർ  $\frac{4}{4}$

1: 5: 2 ഹിംഗ 50 kg സഹ പൊടിയർ 15 kg ഉൾ <sup>ഹിംഗ</sup> <sub>A</sub> കർ

1: 6: 1 വർ  $\frac{4}{4}$

1: 6: 2 ഉൾ കർമ്മം തദ്ദേശ ~~പുറം~~ ഉൾ കർമ്മം വെട്ടി  
കർമ്മം ഉൾ കർമ്മം ഉൾ കർമ്മം തന്നെ ഉൾ  
കർമ്മം ഉൾ കർമ്മം ഉൾ കർമ്മം തന്നെ ഉൾ  
കർമ്മം ഉൾ കർമ്മം ഉൾ കർമ്മം തന്നെ ഉൾ

1: 7: 1 ഉൾ കർമ്മം <sup>ഉൾ കർമ്മം</sup> തന്നെ ഉൾ കർമ്മം  
ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം

2: 1: 1 കർമ്മം തന്നെ ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം  
(ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം)

2: 2: 1 വർ  $\frac{4}{4}$

2: 2: 2 ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം  
ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം

2: 3: 1 ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം തന്നെ ഉൾ കർമ്മം

2 : 4 : 1 ഗുണനാമക ദ്വയാക്ഷരാ വിമുക്തി. <sup>അക്ഷരമാലയിൽ ജഡമല്ലെന്നതോ</sup>  
ക്രിയാക്ഷരക കിടത്തി വൃദ്ധ ~~ജഡമല്ല~~ ~~അക്ഷരമാല~~ പ്രതിപദം രണ്ടിലു  
ലന്നി.

2:

3 : 1 : 1 ജഡ ദ്വയാക്ഷര  
3 : 2 : 1 ഗുരവര മൃഗ.

4 : 1 : 1 മുഖ  $\frac{4}{4}$

4 : ~~1~~ : 2 ഗോമ ഗോമ.

4 : 2 : 2 ഗോമ ഗോമ രണ്ടു

4 : 2 : 2 ഗോമ ഗോമ മുതല ഗോമ അക്ഷര

4 : 3 : 1 മുഖ  $\frac{4}{4}$

4 : 4 : 1 മൃഗ

5 : 1 : 1 മൃഗ.

5 : 2 : 1 മൃഗ. ( മുഖ ഗോമ, ഗോമ അക്ഷര )

5 : 3 : 1 മൃഗ.

6 : 1 : 1 മുഖ

6 : 1 : 2 ബഹു 20

6 : 2 : 1 വരി  $\frac{4}{4}$

6 : 3 : 1 ഗുണ  $\frac{4}{4}$

7 : 1 : 1 ഭി.

7 : 2 : 1 വരി  $\frac{4}{4}$

7 : 2 : 2 ശ്ലാഘി അനന്ത സമഗ്ര കർപാശ അയ ഭക്തസരസ് മുഖ്യ വായ കുമാരൻ മുഖ്യ ശ്രീ പ്രിയ വായന

7 : 3 : 1 വരി  $\frac{4}{4}$   
7 : 3 : 2 അമിത ശ്ലാഘി വായ കർപാശ അയ ഭക്തസരസ് മുഖ്യ വായ കുമാരൻ മുഖ്യ ശ്രീ പ്രിയ വായന  
അമിത ശ്ലാഘി വായ കർപാശ അയ ഭക്തസരസ് മുഖ്യ വായ കുമാരൻ മുഖ്യ ശ്രീ പ്രിയ വായന  
അമിത ശ്ലാഘി വായ കർപാശ അയ ഭക്തസരസ് മുഖ്യ വായ കുമാരൻ മുഖ്യ ശ്രീ പ്രിയ വായന

7 : 4 : 1 വരി  $\frac{4}{4}$

7 : 4 : 2 അമിത ശ്ലാഘി വായ കർപാശ അയ ഭക്തസരസ് മുഖ്യ വായ കുമാരൻ മുഖ്യ ശ്രീ പ്രിയ വായന  
അമിത ശ്ലാഘി വായ കർപാശ അയ ഭക്തസരസ് മുഖ്യ വായ കുമാരൻ മുഖ്യ ശ്രീ പ്രിയ വായന  
അമിത ശ്ലാഘി വായ കർപാശ അയ ഭക്തസരസ് മുഖ്യ വായ കുമാരൻ മുഖ്യ ശ്രീ പ്രിയ വായന

7 : 5 : 1 വരി  $\frac{4}{4}$

(അമിത ശ്ലാഘി വായ കർപാശ അയ ഭക്തസരസ് മുഖ്യ വായ കുമാരൻ മുഖ്യ ശ്രീ പ്രിയ വായന)

മിജക്കാടി വാക്കുകൾ ഹരി

1	W.M.W.S	വിലക്കടൻ	തൊ.	രക്.	ഊ	ഭൂമകർമ്മ
2	V.R.K	കൃഷ്ണാശാസ്ത്ര	"	"	"	ജാലം
3	M.R.N	മുരുകി ജാലം	"	"	"	"
4	K.P.D.K.S	കർമ്മശാസ്ത്ര	"	"	"	അനുഭവശാസ്ത്ര



(AIs)

1. i. i - ରାଶି.

- ପଢ଼ାବକାଳରେ କୃଷକ ଉପାଦାନର ଉପରେ -

ii - ରାଶି.

iii - ରାଶି.

iv - ରାଶି.

2. 3. i. - ରାଶି.

ii ରାଜ୍ୟ ସହାୟତା 30% କର.

3. 4. i - ରାଶି.

ii - ସମ୍ପର୍କରତନା ଗ୍ରହଣ 30 କର

4. 5. i - ରାଶି.

ii - ବ୍ୟୟରତନା ଉପରେ <sup>ଆବିଷୟ.</sup> ଅଧିକ 5%.

ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ 50%.

5. 6. i. - ରାଶି.

ii - କାର୍ଯ୍ୟରତନା ଉପରେ

ସମସ୍ତ ଉପରେ ଆବିଷୟ

ଆବିଷୟ ଉପରେ ଆବିଷୟ

ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ ଆବିଷୟ

ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ

ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ

ii. i - ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ

i. i - ଆବିଷୟ ଉପରେ ଆବିଷୟ ଉପରେ

2. i - ରାଶି.

ii - ପ୍ରାଥମିକ ଉପରେ

3. ii - ଆବିଷୟ ଉପରେ

4.1 - විකසනය ක්‍රියාත්මක කිරීම. ප්‍රධාන අරමුණ වෙදුම් ලැබීමේදී මෙය වෙල විකසනය වෙලට වඩා සාරවත්වීමට පුළුල් විය යුතුය. (ගැටළු අවම කරගැනීමට නිසිය)

1.1 - ප්‍රමාණවත්, ප්‍රමාණවත් සංඛ්‍යාවකි.

2.1 - සෘජු වේ. (වෙනත් වෙනත් වෙදුම් ලැබීමේදී මෙය වෙල විකසනය වෙලට වඩා සාරවත්වීමට පුළුල් විය යුතුය)

1.1 - වේ.

ii - පුළුල් හා සංඛ්‍යාව වෙනස්.

2.1 - වෙනස්වීම.

ii - සංඛ්‍යාව වෙනස්.

3.1 - වේ. (වෙල විකසනය වෙලට වඩා සාරවත්වීමට පුළුල් විය යුතුය)

4.1 - වෙදුම් හා ක්‍රියාකාරකම් සමස්ත සංඛ්‍යාව වෙදුම් කරන ලදී. වෙනත් වෙනත් වෙනත් වෙනත්.

1.1 - පුළුල් - සංඛ්‍යාව හා ප්‍රමාණ අඩු ප්‍රමාණවත්

2.1 - පුළුල් - ප්‍රමාණවත්

3.1 - සංඛ්‍යාව - සංඛ්‍යාව හා ප්‍රමාණ අඩු ප්‍රමාණවත් වෙල.

2.1 - ප්‍රමාණවත් වෙල.

ii - සෘජු වේ.

1.1 - වේ.

2.1 - පුළුල්. 30-35.

3.1 - වේ.

3.1 - වෙනත් වෙනත් වෙනත් වෙනත්

1.1 - සංඛ්‍යාව වෙල කරීම

- සංඛ්‍යාව වෙල කරීම.

- සංඛ්‍යාව වෙල කරීම වෙනත් වෙනත්.

- වෙනත් වෙනත් වෙනත් වෙනත්.

- සංඛ්‍යාව වෙනත් වෙනත් වෙනත් වෙනත්.

- සංඛ්‍යාව වෙනත් වෙනත් වෙනත් වෙනත්.



2 i - නිසි. ( බණ්ඩාරයාගේ මධ්‍යමාධ්‍ය )

ii - බණ්ඩාරයාගේ මධ්‍යමාධ්‍ය ( සරසවියාගේ මධ්‍යමාධ්‍ය )

3 i - දිගු කාලීනව ක්ෂේත්‍ර ජ්‍යෙෂ්ඨ ආකල්පය

දැනට සම්බන්ධ නිවැරදිව.

දැනට මරණ රැස්වීම්

සියලුම ක්‍රියාකාරීව ආකල්පය

4 i - නිසි

ii - බණ්ඩාරයාගේ මධ්‍යමාධ්‍ය යටතේ ජ්‍යෙෂ්ඨ හා ආකල්පය ආදියට සම්බන්ධයක් නැත.

5 i - නිසි. දැන් වලට මෙහෙයවන මධ්‍යමාධ්‍ය.

කාර්යාලයේ AI, (2).

නම.

H. D. S. නමුරැස්ස.

L. W. M. සුනිල්ල.

පන්දුන් මොලිකා

වරැන් මොනරේ.

සේවා ස්ථානය

මො. සේ. රැජ. ද. මුල්ල.

"

මො. සේ. ඉ. ප්‍රා. වරැන්මුල්ල.

"

"

✓ 4/11/77 - Fungal Evaluation - Anuradhapura,  
 Farmer's group. I.P.  
 10.00 A.M  
 Provincial Director's  
 Office.  
 (Farmers)

1.1.1 - වැන - 1/4

1.1.2 - බඩ 1/4

1.1.3 - බඩ 1/4

1.1.4 - බඩ 1/4

1.2.1 - බඩ 1/4

1.2.2 - #

1.2.3 - 1 වන වර්ගයේ ගුණිත - 1/4  
 2 වන වර්ගයේ ගුණිත - 1/4  
 3 වන වර්ගයේ ගුණිත - 3/4  
 4 වන වර්ගයේ ගුණිත - 3/4

1.3.1 - බඩ - 3/4

1.3.2 - රු - 2000 / 2

1.4.1 - බඩ - 2/4  
 වැනි වර්ගයේ ගුණිත - 2/4

1.4.2 - ඩි ඩුල් - 10 වර්ග. 1/4

1.5.1 - බඩ - 3/4 (විවිධ වර්ගයේ ගුණිත)

1.5.2 - වැනි වර්ගයේ ගුණිත 1/4 වැනි වර්ගයේ ගුණිත

1.6.1 - බඩ - 3/4

1.6.2 - වැනි වර්ගයේ ගුණිත 3/4

1.7.1 - ഏതെങ്കിലും സ്ഥലത്ത് എവിടെയെങ്കിലും ഒരു സ്ഥലം.  $1/4$

2.1.1 - സാമ്പത്തിക സാഹചര്യങ്ങൾ ഉണ്ടാകാൻ ഒരു പ്രതികരണ പ്രകാരം  
എല്ലാ സ്ഥലങ്ങളിലും.  $5/5$

2.1.1 ഏ  $5/5$

2.2.2 - സാമ്പത്തിക.  $5/5$

2.3.1 - സാമ്പത്തിക സാഹചര്യങ്ങൾ - ഉണ്ടാകാൻ എല്ലാ സ്ഥലങ്ങളിലും.  
എല്ലാ സ്ഥലങ്ങളിലും.  $5/5$

2.4.1 -  $\alpha$  എല്ലാ സ്ഥലങ്ങളിലും ഉണ്ടാകാൻ എല്ലാ സ്ഥലങ്ങളിലും  $3/5$

$\alpha$   $\beta$   $\gamma$   $\delta$   $\epsilon$   $\zeta$   $\eta$   $\theta$   $\iota$   $\kappa$   $\lambda$   $\mu$   $\nu$   $\xi$   $\omicron$   $\pi$   $\rho$   $\sigma$   $\tau$   $\upsilon$   $\phi$   $\chi$   $\psi$   $\omega$   
എല്ലാ സ്ഥലങ്ങളിലും  $4/5$

$\alpha$   $\beta$   $\gamma$   $\delta$   $\epsilon$   $\zeta$   $\eta$   $\theta$   $\iota$   $\kappa$   $\lambda$   $\mu$   $\nu$   $\xi$   $\omicron$   $\pi$   $\rho$   $\sigma$   $\tau$   $\upsilon$   $\phi$   $\chi$   $\psi$   $\omega$  (  $\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, \omicron, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega$  )  
 $3/5$

3.1.1 . എല്ലാ 3 സ്ഥലങ്ങളിലും.  $5/5$

3.2.1 . എല്ലാ -  $5/5$

4.1.1 . ഏ  $5/5$

4.1.2 . സാമ്പത്തിക.  $5/5$

4.2.1 - എല്ലാ സ്ഥലങ്ങളിലും  $4/5$

എല്ലാ സ്ഥലങ്ങളിലും  $1/5$

4.3.2 - സാമ്പത്തിക സ്ഥലങ്ങളിലും.  $5/5$

4.3.1 . ഏ.  $1/5$

4.4.1 . ഏ. സാമ്പത്തിക സ്ഥലങ്ങളിലും  $5/5$

5.1.1 - ~~ଅନୁପାଳନ~~ ~~କର୍ମ~~ - 5/5

5.2.1 - ମାତ୍ର - 5/5

5.3.1 - ମାତ୍ର 5/5

6.1.1 - ଦର୍ଶ - 5/5

6.2.1 - ~~ଅନୁ~~ ~~ଅନୁ~~ 'ଅନୁ' - 5 ଟଙ୍କା 10 ସହର ଦର୍ଶନ 2/5

6.2.1 - ଦର୍ଶ - 5/5

6.3.1 - ମାତ୍ର 5/5

7.1.1 }  
ଅନୁ ଅନୁ ଅନୁ ଅନୁ } 5/5  
ଅନୁ ଅନୁ ଅନୁ ଅନୁ }  
ଅନୁ ଅନୁ ଅନୁ ଅନୁ }

7.5.1 - ଦର୍ଶ - 5/5

1. T. M. 50000 ക്ലാസ്സുകൾ.
2. A. G. 50000 ക്ലാസ്സുകൾ.
3. A. G. 50000 ക്ലാസ്സുകൾ.
4. കേന്ദ്രീകൃത സിസ്റ്റം.
5. R. V. ക്ലാസ്സുകൾ.

- 1.1.1. ഉപയോക്താക്കളുടെ എണ്ണം 5/5 10:30 Am
- 1.1.2. ഉപയോക്താക്കളുടെയും സഹായകരുടെയും സംഖ്യ (I.P.)
- 1.1.3. വിതരണത്തിനും സഹായത്തിനും ബാധിക്കാത്തവരുടെ എണ്ണം (Farmers)
- 1.1.4. മുഖേനയ്ക്ക് നേരിടേണ്ടുന്ന കടമകളുടെയും കൃഷിയുടെയും വിവരങ്ങൾ
- 2.1. ഉപയോക്താക്കളുടെ കൃഷിയിലെ പ്രധാന പ്രശ്നങ്ങൾ
- 2.2. കടമകൾ
- 2.3 - അധികാരപ്പെടുത്തലിന് അനുബന്ധമായി, കൃഷി, ഉപയോക്താക്കളുടെയും സഹായകരുടെയും കൃഷിയിലെ പ്രശ്നങ്ങൾ
- 3.1. - അധികാരപ്പെടുത്തലിന് അനുബന്ധമായി, കൃഷിയിലെ പ്രശ്നങ്ങൾ
- 3.2. 20% കടമകൾ
- 4.1 - അധികാരപ്പെടുത്തലിന് അനുബന്ധമായി, കൃഷിയിലെ പ്രശ്നങ്ങൾ
- 4.2 - 20% കടമകൾ
- 5.1 - അധികാരപ്പെടുത്തലിന് അനുബന്ധമായി, കൃഷിയിലെ പ്രശ്നങ്ങൾ
- 5.2. കൃഷിയിലെ പ്രധാന പ്രശ്നങ്ങൾ
- 6.1. - അധികാരപ്പെടുത്തലിന് അനുബന്ധമായി, കൃഷിയിലെ പ്രശ്നങ്ങൾ
- 6.2 - അധികാരപ്പെടുത്തലിന് അനുബന്ധമായി, കൃഷിയിലെ പ്രശ്നങ്ങൾ

~~7.1~~

7.1 - කල හැකි. නියම වශයෙන් දිගු වීම හා  
දිගු කිරීම සඳහා

1.1. තෙවැනි පැරණි පොත

2.2 - කුඩා වෛද්‍ය පොත. නිවැරදි පුද්ගල විවිධ වර්ග.  
සුදානම් කිරීම හා නව පොත

3.1. නිවැරදි වෛද්‍ය පොත හා නව වෛද්‍ය පොත පොත  
විවිධ වර්ග

4.1 - විවිධ පුද්ගල පොත. විවිධ වෛද්‍ය විද්‍යා  
විවිධ විවිධ පුද්ගල පුද්ගල

1.1. විවිධ පොත

2.1 - විවිධ පුද්ගල පොත, විවිධ වෛද්‍ය විද්‍යා විවිධ.

1.1. විවිධ පොත

1.2. විවිධ පොත. විවිධ පුද්ගල පුද්ගල පුද්ගල

2.1 - විවිධ පුද්ගල පුද්ගල පුද්ගල

2.2. විවිධ පුද්ගල පුද්ගල පුද්ගල

3.1 - විවිධ පුද්ගල පුද්ගල පුද්ගල. විවිධ

4.1 - විවිධ පුද්ගල පුද්ගල පුද්ගල හා විවිධ වෛද්‍ය විද්‍යා විවිධ

1.1 - විවිධ පුද්ගල පුද්ගල පුද්ගල. විවිධ

2.1 - විවිධ පුද්ගල පුද්ගල පුද්ගල.

3.1 - විවිධ පුද්ගල පුද්ගල පුද්ගල, විවිධ වෛද්‍ය විද්‍යා විවිධ

1.6 - විවිධ පුද්ගල පුද්ගල පුද්ගල

1.2 - 10/15/1



6.2.1. මගී

6.3.1. ව්‍යාපෘතික ව්‍යවස්ථාපිත වෘත්තීය

7.1.1. - පොදු ජනතාව විසින් පවත්වාගෙන යාමට ලක්වන සේ - සේවා සැපයීමේ වේගය, ගුණාත්මක බව සහ වටිනාකම.

7.5.1. මෙහි දැක්වූ විධිවිධාන සලකා බැලීමේදී

සේවකයන්ගේ නම

විස්තර

1. I. G. මහේස්වරී

සේවයේ සේවයේ රඳවා

2. G. A. ජයවර්ධන මුනරත්න

2.1. 4. 1. ආරක්ෂක

3. W. A. විජේසේන

3.1. 2. 1. සේවයේ

4. M. P. මහේස්වරී

4.1. 1. 1. සේවයේ

5. S. K. සේනාරත්න

5.1. 1. 1. සේවයේ

2009/2/27 アヌラダプラ (プロビンシャル) 地区

12<sup>th</sup>/02/2009

Mr. P.R. Mahindapala  
Deputy Director  
Provincial Department of Agriculture - NCP  
Anuradhapura

Dear Sir

**TERMINAL EVALUATION OF THE JICA IPNS PROJECT**

As per the telephone conversation we had with you on 12th February 2009, we would like to confirm the following schedule as agreed.

**Objective of the meeting and the visit:**

To collect information and the feedback of the stakeholders and the beneficiaries of IPNS Project to evaluate relevance, effectiveness, efficiency, impact and sustainability of the Project.

**Date:** 27<sup>th</sup> February 2009

**Place of the meeting :** Provincial Director's office - Anuradhapura

**Time:** 01.30 A.M. to 3.00 P.M.

**Participants: (please make necessary arrangement)**

1. Director
2. Deputy Director
3. 5 Agricultural Instructors (AI) and other field level Officers (Randomly selected officers who have participated in IPNS Project)
4. 10 farmers (Randomly selected farmers who have participated in IPNS Project)

Your kind cooperation in this regard is highly appreciated.

Thank you,  
Yours Sincerely

.....  
Jun-ichiro Yamada  
IPNS Project Evaluation Team Leader  
Adviser for Agriculture, Irrigation and Rural Development  
JICA Expert

CC: Mr. Ranjan Dharmawardana, Director, National Fertilizer Secretariat, MAD & AS  
Dr. W.M.A.D.W. Wickramasinghe, National Coordinator of IPNS Project  
Dr. J.P. Atapattu, Assistant Director, Fertilizer Unit, Department of Agriculture  
Mr. Yuasa, Dr. Punchibanda, JICA Sri Lanka Office

## Terminal Evaluation

## FIELD LEVEL MEETING

Anuradhapura.

Provincial - 1:30 P.M. ATTENDANCE

No	Name of the participant	Designation and place	Signature
F 01	M. A. Sisira Ranjith Madurasinghe - Galkadawala		
F 02	H. P. Somasiri	Maradanmaduwa.	
F 03	M. M. S. Gunarathne	Mawatha wewa.	
F 04	S. Gunawardhane Herath - Rathnal wetiya.		
F 05	S. R. G. Jayasiri Samarasinghe. Nanwaththegama.		
F 06	E. S. Soysa -	Thurappane.	
F 07	P. B. Balasooriya.	Thurappane - Italgama.	
AI 08	G. K. S. Chandralatha.	AI. Thalawa.	
AI 09	W. H. M. P. Wijekoon.	AI. Kapugolluwa.	
AI 10	D. M. Salinda Dissanayake	AI. Kumbuthigollawa.	
AI 11	A. M. B. F. Siri Sooriya	AI. Mihintale.	
AI 12	Lopali Dissanayake.	AI. Eppawala.	
AI 13	M. B. Jenapala	AI. Murighahawela.	
AI 14	H. M. G. Wiye Bandara.	AI. Palagala.	
AI 15	K. Rathnayake.	AI. Medawachchiya.	
A 16	M. A. Wijerathne.	A.D.A. Anuradhapura Region	
A 17	A. M. B. M. Abeyasinghe.	A.D.A. Italgama.	
AI 18	K. C. S. Samara Wickrama.	AI - Kammirigawewa.	
AI 19	D. M. K. B. Dissanayake.	Office of Subject Matter - Anuradhapura.	
AI 20	P. Ramarathna	Provincial Agronomist of Medawachchiya	
AI 21	W. Rajaratne.	Kahatagasdigiya	
AI 22	D. S. D. Jayasooriya.	AI. Kahatagasdigiya	
23			
24			
25			

Integrated Plant Nutrition System Programme

Terminal Evaluation

FIELD LEVEL MEETING

7/02/2009

Provincial - 1.30 P.M. ATTENDANCE

ANURADHAPURA

No	Name of the participant	Designation and place	Signature
01	M.A. සේනරත්න (රජයේ) මධ්‍යම විද්‍යාලය	ලේකම් - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
02	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
03	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
04	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
05	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
06	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
07	P.B. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
08	A.R.S. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
09	W.H.M.P. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
10	D.M. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
11	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
12	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
13	M.B. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
14	H.A.G. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
15	K. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
16	M.A. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
17	A.M.P.N. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
18	L.C.S. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
19	D.M.K.B. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
20	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
21	ඒ. ඒ. ඒ. ඒ. ඒ.	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
22	D.S.D. මාලකාරණ	විද්‍යා මාලා - මහලක්ෂ්මි මහල - මහලක්ෂ්මි මහල	[Signature]
23			
24			
25			

AI - Group 1

AI - Group

Q 1.1.1 ಎಲಿ.

Q 1.1.2 ಎಲಿ

Q 1.1.3 ಎಲಿ

Q 1.1.4 ಎಲಿ

Q 1.2.1 ಎಲಿ

Q 1.2.2 —

Q 1.2.3 —

Q 1.3.1 ಎಲಿ

Q 1.3.2 15%

Q 1.4.1 ಎಲಿ

Q 1.4.2 15% - 20%

Q 1.5.1 ಎಲಿ ~~ಎ~~

Q 1.5.2 20%

Q 1.6.1 ಎಲಿ

Q 1.6.2 \* ಪ್ರತಿಯೊಂದು ಯುನಿಟ್‌ನಲ್ಲಿಯೂ ಆಯ್ಕೆಗಳು

\* ಪ್ರತಿಬಂಧಕ ಶಕ್ತಿ

\* ತಾಂತ್ರಿಕ ಬಾಧಕ ಆಯ್ಕೆಗಳು

\* ನಿರೀಕ್ಷಿಸಿದ ಬಾಧಕ ಬಾಧಕ ಆಯ್ಕೆಗಳು

\* ಕೆಲವು ಶರಣುಗಳ ಬಗ್ಗೆ ಆಯ್ಕೆಗಳು.

Q 1.7.1 825 ರೂಪಾಯಿ ಕಡಿಮೆ ಪ್ರತಿ ಭವನಗಳಿಗೆ ಮತ್ತು ಆಯ್ಕೆಗಳು ಬಾಧಕ ಆಯ್ಕೆಗಳು ಮತ್ತು ಕಡಿಮೆ.

Q 2.1.1. නානාගිණි අරමුදු ආර්ථික තත්ව ක්‍රියාත්මක කිරීමේදී කොටසක් ඉටු නොවී පැවැත්වේ.  
පි:- අංශ වාසු ප්‍රදාන කොටසට ලබාදීමට කොටසක් නොමැත (සත්‍ය)

Q 2.1.1. බව:

Q 2.2.2. පොදු.

Q 2.3.1. බව

Q 2.4.1. බව. තීරණය වූයේ, ආර්ථික ක්‍රියාවට නොමැති.

Q

Q 3.1.1. ප්‍රතිපත්ති ක්‍රියාවක්.

Q 3.2.1. ~~ප්‍රතිපත්ති~~ තීරණය. ඉන්පසුවද පිටුපසට, ප්‍රතිපත්ති ක්‍රියාවට නොමැති, ප්‍රතිපත්ති ක්‍රියාවට නොමැති.

Q 4.1.1. බව.

Q 4.1.2. පාර්ශ්වය.

Q 4.2.1. කොටසක් නොමැතිව පැවැත්වේ.

Q 4.2.1. කොටසක් නොමැතිව කොටසක් ආර්ථික ක්‍රියාවට නොමැති.

Q 4.3.1. බව

Q 4.4.1. නිවැරදිව ප්‍රතිපත්ති ක්‍රියාවට නොමැති.

Q 5.1.1. බව.

Q 5.2.1. නැත.

Q 5.3.1. \* පිටුපසට ප්‍රතිපත්ති ක්‍රියාවට නොමැති.





- ① W. H. M. P. විද්‍යාලය
- ② D. M. කැලණි විද්‍යාලය
- ③ L. C. S. කොළඹ
- ④ D. S. S. පාසැල
- ⑤ W. M. S. පාසැල

AI Group 2

1.1.1 - ඔව් ආදායම් ප්‍රවෘත්ති වලින් දින හතරක කාලයට,

1.1.2 - දින හතරක කාලයට දින - සභාව 5. <sup>සභාව 5</sup>

1.1.3. - කොමිෂන් මණ්ඩලයක් සඳහා පිළිබඳව අදාළ පනත් පනවන ලදී.

1.1.3 - ඔව්. සභාව 5.

1.1.4 - ඔව්. - කොමිෂන් මණ්ඩලයක්. සභාව.

1.2.1 - - ගැන. - මුද්‍රිතව පිටවූ පනත් පනවන ලදී.

1.2.2 - සභාව.

1.3.1 - අදාළ පනත් පනවන ලදී.

1.3.2 - කොමිෂන් මණ්ඩලයක් සඳහා පිළිබඳව ගැන.

1.4.1 - අදාළ පනත් පනවන ලදී.

1.4.2 - කොමිෂන් මණ්ඩලයක් සඳහා පිළිබඳව ගැන.

1.5.1 - 10% ක පනත් පනවන ලදී.

1.5.2 - 10%

1.6.1 - ඔව්.

1.6.2 - කොමිෂන් මණ්ඩලයක් සඳහා පිළිබඳව ගැන.

1.7.1 - ඔව්. කොමිෂන් මණ්ඩලයක් සඳහා පිළිබඳව ගැන.

1.7.2 - කොමිෂන් මණ්ඩලයක් සඳහා පිළිබඳව ගැන.

2.1.1 - ප්‍රධාන මණ්ඩලයක් සඳහා පිළිබඳව ගැන.

2.2.1 - ඔව්.

2.2.2 - කොමිෂන් මණ්ඩලයක් සඳහා පිළිබඳව ගැන.

2.3.1 - ප්‍රධාන මණ්ඩලයක්. 256

- 2.4.1 - ജാതി ജന്മത്തിന്റെ സമാഹാരം അല്ലെങ്കിൽ അതിന്റെ
- 3.1.1 - കൃഷിയുടെ.
- 3.2.1 - മൂലം.
- 4.1.1 - മിമി.
- 4.1.2 - അനുഭവങ്ങൾ
- 4.2.1 - അതിന്റെ രൂപം (അല്ലെങ്കിൽ അതിന്റെ)
- 4.2.2 - അതിന്റെ രൂപം അല്ലെങ്കിൽ അതിന്റെ രൂപം
- 4.3.1 - മൂലം.
- 4.4.1 - മിമി - അല്ലെങ്കിൽ, വിദ്യകളിൽ അല്ലെങ്കിൽ മറ്റ്  
അനുഭവങ്ങൾ അല്ലെങ്കിൽ മറ്റ്. അതിന്റെ അനുഭവങ്ങൾ  
അല്ലെങ്കിൽ മറ്റ്.
- 5.1.1 - മൂലം.
- 5.2.2 - മൂലം.
- 5.3.1 - മിമി. അല്ലെങ്കിൽ അതിന്റെ അനുഭവങ്ങൾ  
അല്ലെങ്കിൽ മറ്റ്. അല്ലെങ്കിൽ അതിന്റെ അനുഭവങ്ങൾ  
അല്ലെങ്കിൽ മറ്റ്.
- 6.1.1 - മൂലം അല്ലെങ്കിൽ മൂലം.
- 6.1.2 - അല്ലെങ്കിൽ അല്ലെങ്കിൽ മൂലം.
- 6.2.1 - മിമി. മറ്റ് അനുഭവങ്ങൾ അല്ലെങ്കിൽ അതിന്റെ അനുഭവങ്ങൾ
- 6.3.1 - മൂലം.
- 7.1.1 - വിദ്യകളിൽ അല്ലെങ്കിൽ മൂലം. അല്ലെങ്കിൽ അതിന്റെ അനുഭവങ്ങൾ  
അല്ലെങ്കിൽ മറ്റ്. അല്ലെങ്കിൽ അതിന്റെ അനുഭവങ്ങൾ
- 7.2.1 - മിമി. മറ്റ് അല്ലെങ്കിൽ അതിന്റെ അനുഭവങ്ങൾ  
അല്ലെങ്കിൽ മറ്റ്.
- 7.2.2 - മിമി. അല്ലെങ്കിൽ അതിന്റെ അനുഭവങ്ങൾ  
അല്ലെങ്കിൽ മറ്റ്.

7.3.1 - വിട.   
 കണ്ടിട്ടുള്ളവരുടെ പേരുകളും   
 പ്രവേശന ഘട്ടം   
 പാഠ്യപുസ്തകം   
 കണ്ടിട്ടുള്ളവരുടെ പേരും   
 കണ്ടിട്ടുള്ളവരുടെ പേരും (30, )

7.4.1 - വിട.

7.4.2 - കണ്ടിട്ടുള്ളവരുടെ പേരുകളും   
 പ്രവേശന ഘട്ടം   
 പാഠ്യപുസ്തകം   
 കണ്ടിട്ടുള്ളവരുടെ പേരും   
 കണ്ടിട്ടുള്ളവരുടെ പേരും

7.5.1 - പേരുകൾ.

1. M. B. ഉപയോഗം
2. K. ഉപയോഗം
3. ഉപയോഗം ഉപയോഗം
4. G. R. S. ഉപയോഗം
5. H. M. G. ഉപയോഗം
6. H. M. B. ഉപയോഗം

Farmer group

Provincial - Anuradhapura  
1.30 P.M.



- 1.1.1 - 1 වන කොටසේ ඇති...
- 1.1.2 - 2 වන කොටසේ ඇති...
- 1.1.3 - 3 වන කොටසේ ඇති...
- 1.1.4 - 4 වන කොටසේ ඇති...
- 1.2.1 - 1 වන කොටසේ ඇති...
- 1.2.2 - 2 වන කොටසේ ඇති...
- 1.2.3 - 3 වන කොටසේ ඇති...
- 1.3.1 - 1 වන කොටසේ ඇති...
- 1.3.2 - 2 වන කොටසේ ඇති...
- 1.4.1 - 1 වන කොටසේ ඇති...
- 1.4.2 - 2 වන කොටසේ ඇති...
- 1.5.1 - 1 වන කොටසේ ඇති...
- 16.1 - 1 වන කොටසේ ඇති...

6.2. - ಕಾರಣದಿಂದ ಬೇರೆ ಅನುಭವ ವಿಸ್ತರಿಸಿ.  
- ಇದರಲ್ಲಿ ಇದೇನು ಇದರಲ್ಲಿಯೂ ಅನುಭವದ ಕಾರಣ.

17.1 - ವಾಕ್ಯದ ವಿವರಣೆ.

2.1.1 - ವಾಕ್ಯದ - ಅರ್ಥದ ಪ್ರಕಾರ ಇದನ್ನು ಕಾರಣ ಮತ್ತು ಇದರಲ್ಲಿಯೂ  
ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ.

2.2.1 - ವಿವರ.

2.2.2 - ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ.

2.3.1 - ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ.

\* - ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ  
ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ  
ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ

2.4.1 - ವಿವರ.

3.1.1 - ವಿವರಣೆ.

3.2.1 - ವಿವರಣೆ.

4.1.1 - ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ.

4.1.2 - ವಿವರಣೆ.

4.2.1 - ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ  
ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ

4.2.2 - ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ.

4.3.1 - ವಿವರಣೆ.

4.4.1 - ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ  
ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ

5.1.1 - ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ  
ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ

5.2.1 - ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ  
ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ ವಿವರಣೆ ಮತ್ತು ವಾಕ್ಯದ

5.3.1 - ವಿವರಣೆ.

6.1.1 - ಎಸ್.

6.1.2 - 15% ರ ವಸತಿ

6.2.1 - ಎಸ್.

6.3.1 - ಸಿಬ್ಬಂದಿ ಸಂಖ್ಯೆ, ಸೇವೆ, ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ  
ಸಿಬ್ಬಂದಿ ಸಂಖ್ಯೆ, ಸೇವೆ, ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ  
ಸಿಬ್ಬಂದಿ ಸಂಖ್ಯೆ, ಸೇವೆ, ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ

7.1.1 - ನೂರಕ್ಕಿಂತ ಹೆಚ್ಚಿನ ಸಂಖ್ಯೆ.

ಅಧಿಕಾರ ವಹಿಸಿ ಸು.

ಸಿಬ್ಬಂದಿ ಸಂಖ್ಯೆ, ಸೇವೆ, ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ

ಅಧಿಕಾರ ವಹಿಸಿ ಸು.

7.2.1

ಅಧಿಕಾರ ವಹಿಸಿ ಸು.

1. E.S. ಸೇವೆಗಳು - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ
2. M. ಬಾ/ಬಿ/ಸಿ - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ
3. P. B. ಸೇವೆಗಳು - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ
4. S. R. G. ಸೇವೆಗಳು - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ
5. J - ಸೇವೆಗಳು - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ
6. H. P. ಸೇವೆಗಳು - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ
7. H - ಸೇವೆಗಳು - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ
8. H.H.S. ಸೇವೆಗಳು - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ
9. ಎಸ್. ಬಿ. ಸೇವೆಗಳು - ಸೇವೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಅನುಮೋದನೆ ಮತ್ತು ಅನುಮತಿ

農家、農業普及員等インタビュー調査

実施状況写真





2009/2/17 クルネガラ地区 (ヘマチャンドラ調査員の調査概要説明)



2009/2/19 ボロナルワ地区 (質問事項に対してグループ討議)



2009/2/20 ハンバントタ（プロビンシャル）地区（概要説明中）



2009/2/20 ハンバントタ（インタープロビンシャル）地区（グループ討議中）



2009/2/27 アスラダブラ (インタープロビシヤル) 地区 (グループ討議中)



2009/2/27 アヌラダブラ (プロビシヤル) 地区 (概要説明中)

## 文献等調査（妥当性関係）

### National Agricultural Policy より

Under the Goal and objectives of National agricultural policy ,  
Item No. 4 highlighted,

" Adopt productive farming systems and improved Agro -technologies with a view to reduce the unit cost of production and increase profits.

In the same document further stress the need for promoting agricultural production through

"1.4 - Promote good Agricultural practices such as integrated pest management (IPM) and Integrated Plant Nutrition Management (IPNM) for sustainable agricultural development"

"1.8- Introduce improved and modern technologies to the village wherever and whenever possible."

In the national policy document under the **Fertilizer category** it clearly says the need for this kind of programme

"3.1 Promote production and utilization of organic and bio- fertilizers and gradually reduce the use of chemical fertilizers through Integrated Plant Nutritional Systems (IPNS)

" 3.2 Ensure.....while providing soil and plant testing facilities for their rational use through site specific fertilizer application.

In the national policy document under the **Soil Conservation**

"8.2 Create awareness among the farming communities on the importance of soil conservation for sustainable agricultural development

### 2007- 2010 - National campaign to motivate domestic food production より

Under the objective of the program

" No.6 - Improving the income of the farming community

" No.7 - Reducing the use of chemical fertilizer by 25% in the next 3 years by enhancing the use of organic manure.

" No. 8 - Dissamination of modern and appropriate technologies

Page 14 of the 2007- 2010 - National campaign to motivate domestic food production says

"Reduce importing of chemical fertilizer by 25% within the next 03 years. In this regard necessary training , media and publicity and field demonstration will be organized for enhancing the required knowledge and skill relating to production and the use of organic manure.

Page 15 - under 4.2

"Possible action left for achieving sustainable agricultural development in to follow the Integrated plant nutrition system (IPNS) The primary component of this would be to increase the use of organic manure as a means to reduce the import of chemical fertilizers by 25%, within next 3 years.

Extracted form the collection of news paper article より

**Dinamina- 05/12/2008 p13**

In the world market chemical fertilizer prices are increasing every year.

year 2007 - expenditure for chemical fertilizer- 12,000 million

2008 - increase up to 40,000 million

2009 - Estimated cost for the year 67,000 million

This amount is 4% of the gross national product (GNP) Farmers pay only 4% to 6% of the the cost of the fertilizer. It we use 25% of organic fertilizer, we can save huge amount of money for the development of other sectors of the country.

For the paddy cultivation we use only 55% of the imported chemical fertilizer. According to the research done, we do not need that much of chemical fertilizers. If we use organic fertilizer, we could reduce the production cost at least by 25% and we could increase the soil fertility in the long run.

**Daily news - 29/09/2008 pg 04**

According to the representatives of the fertilizer secretariat in Anuradhapura the actual open market value of the subsidized fertilizer at the rate of Rs. 350 per 50 Kg bag is 5650 million in forthcoming Maha season.

**Chemical Fertilizer requirement, Expenditure and government Contribution 2008**

Type of Fertilizer	Government Contribution		Farmers Contribution		Imported during 2008
	% of Rs	50 kgs bag	% of Rs	50 kg bag	
T.S.P	96.09	7,708.45	3.91	350	89,000 mt
UREA	94.06	5,348.75	5.94	350	18,0000 mt
M.O.P	95.24	6,811.48	4.76	350	66,000 mt

**Other than the above there are few common factors in news paper articles for IPNS Programme to be continued**

**Environmental Factors**

1. Using chemical fertilizer for the paddy cultivation has created several environmental problems. Only 30 % of the chemical fertilizer absorb in to the plants. Rest of the chemical fertilizer contaminated with soil and water resources. This has created a serious health hazards to the people. in Anuradhapura and Polonnaruwa districts.
2. Environmental Pollution Change of the Ph value of the soil. IPNS helps to minimize the damage.
3. Using both chemical and carbonic fertilizer for the cultivation increases the yield and save the soil condition and the environment.
4. IPNS helps for strong and healthy plant growth and it will contribute to minimize the use of chemical weedkiller and fungicide

**Social Factors**

1. IPNS helps to provide modern scientific agriculture and farming knowledge to the ordinary farmers in the country. IPNS provides this knowledge and skills using practical and participatory approach. It has created an environment among traditional farmers to broaden their way of thinking and behaviour.

**Economic Factors**

1. IPNS provides necessary inputs to reduce cost of production and increase the out put. This will helps to alleviate poverty in the long run.

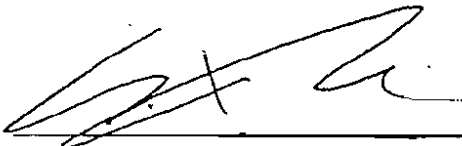
關係資料

RECORD OF DISCUSSIONS  
BETWEEN  
JAPAN INTERNATIONAL COOPERATION AGENCY  
AND  
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF  
THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA ON  
TECHNICAL COOPERATION PROJECT FOR  
PROMOTION OF INTEGRATED PLANT NUTRITION PRACTICE  
AMONG FARMERS FOR SUSTAINABLE IMPROVEMENT OF CROP PRODUCTIVITY  
AND ALLEVIATING POVERTY

Japan International Cooperation Agency (hereinafter referred to as "JICA") through its Resident Representative of Sri Lanka Office, exchanged views and had a series of discussions with authorities of the Democratic Socialist Republic of Sri Lanka concerned with respect to desirable measures to be taken by JICA and the Government of the Democratic Socialist Republic of Sri Lanka for the successful implementation of the Promotion of Integrated Plant Nutrition Practice among Farmers for Sustainable Improvement of Crop Productivity and Alleviating Poverty.

As a result of the discussions, both parties represented by those who signed below, agreed on the matters referred to in the document attached hereto.

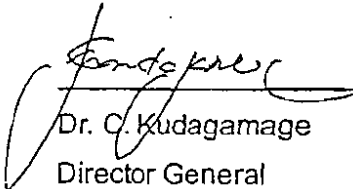
Colombo, 22 August, 2006




Hideki Sakata  
Deputy Resident Representative  
JICA Sri Lanka Office



Mr. Tissa Warnasuriya  
Secretary  
Ministry of Agricultural Development



Dr. C. Kudagama  
Director General  
Department of Agriculture



Mrs. Dhammika Ranasinghe  
Deputy Director, Technical Assistance  
Department of External Resource  
Ministry of Finance and Planning



Mr. Gamini Munasinghe  
Director, National Fertilizer Secretariat  
Ministry of Agricultural Development



## THE ATTACHED DOCUMENT

The Government of the Democratic Socialist Republic of Sri Lanka will implement the Technical Cooperation Project for Promotion of Integrated Plant Nutrition Practice among Farmers for Sustainable Improvement of Crop Productivity and Alleviating Poverty in cooperation with Japan International Cooperation Agency (hereinafter referred to as "JICA").

On behalf of the Government of Sri Lanka, The National Fertilizer Secretariat (hereinafter referred to as "NFS") and the Department of Agriculture (hereinafter referred to as "DOA") of the Ministry of Agricultural Development (hereinafter referred to as "MOAD") of Sri Lanka will conduct the In-Country Training Program with the support of the technical cooperation scheme of JICA. The Training Program will be held during the period of almost three (3) years from the Japanese fiscal year (JFY) 2006 to JFY 2008, subject to amendments based on the decisions reached at the periodical consultations between both parties.

The Training Program shall be conducted in accordance with the followings;

### 1. THE EXECUTING AGENCY

- 1.1 The executing agency of the training program will be the Fertilizer Unit of the DOA with the cooperation of the NFS, Rice Research and Development Institute, in Bathalagoda, Ibbagamuwa (hereinafter referred to as "RRDI"), Provincial Departments of Agriculture (hereinafter referred to as "PDOA") and the other relevant departments and institutions in Sri Lanka.
- 1.2 A steering committee consists with the officials represent by the institutions mentioned in section 1.1 of this RD and JICA will revise the progress of the project at least once a cultivation season.

### 2. TITLE AND COMPONENTS OF THE TRAINING PROGRAM

- 2.1 The name of the training program shall be "In-Country Training on Promotion of Integrated Plant Nutrition System (hereinafter referred to as "IPNS") among Farmers for Sustainable Improvement of Crop Productivity and Alleviating Poverty (hereinafter referred to as "Training Program")."
- 2.2 The Training Program shall be consisted with followings;
  - (I) A trainer training for Assistant Directors (AD), Agricultural Instructors (AI) on dissemination of IPNS and
  - (II) Farmer training for food crop growers on IPNS, conducted by AD and AI in their respective regions.

2.3 The content of the training shall be based on the new fertilizer recommendation method developed by RRD1 and use of organic manure on crop production for IPNS.

### 3. PURPOSE OF THE TRAINING PROGRAM

The purpose of the Training Program is to promote the IPNS among food crop growers in major paddy and other food crop growing districts. As a result, in the long run, the Training Program is to contribute for alleviating poverty reduction in rural agricultural areas.

### 4. OBJECTIVES TO BE ACHIEVED BY THE TRAINING PROGRAM

By successful completion of the Training Program, the participants will be able to achieve as follows;

- (1) Re-ascertained the benefits of IPNS and techniques of application of IPNS.
- (2) Dissemination of knowledge and skill on IPNS of AD and AI to the food crop growers will be strengthened and improved.
- (3) The confidence and ability of application of IPNS by food crop growers will be improved and diffused among food crop growers in major food crop growing areas.

### 5. CONTENT OF THE TRAINING PROGRAM

#### 5.1 In the first year of the cooperation period (JFY 2006)

- 5.1.1 The target district for JFY 2006 will be Kurunegala district.
- 5.1.2 Field tests for fertilizer recommendation developed by RRD1, will be studied in collaboration with the Soils Laboratory of identified region/district.
- 5.1.3 A five day Research Assistants (hereinafter referred to as "RA") training for soil test will be conducted by RRD1.
- 5.1.4 Preparations for conducting tests of the soil samples of food crop growers' fields in different climate and soil zones in the Kurunegala district.
- 5.1.5 Around 200 soil samples received from different climate and soil zones in Kurunegala district will be completed in the first year (2006/2007 Maha season) by regional laboratories to be used for farmer trainings.
- 5.1.6 An illustrative extension brochures to be used for trainers training and farmer training on IPNS will be prepared and produce sufficient number of copies by the Executing Agency of the section 1 of this RD.
- 5.1.7 A full day Trainer Training will be conducted by the Executing Agency for three (3) AD, six (6) subject matter specialists and ninety (90) AI in the Kurunegala district enabling them to become resource persons of the farmer training.
- 5.1.8 An half a day pilot training program for AD, AI and farmers of three (3) AI ranges in different climate zones in the Kurunegala district will be conducted by the Executing Agency of section 1 of this RD, as a trial test of the farmer training.

273

sat

q h

as

5.1.9 The training manuals and curricula of IPNS will be prepared for the Training Program by the Executing Agency of the section 1 of this RD.

5.1.10 Half a day farmer training, including lecture type and practice on IPNS will be conducted by AD and AI in all AI ranges in the Kurunegala district for selected farmers at least three times a season.

## 5.2 In the second year of the cooperation period (JFY 2007)

5.2.1 The target districts for JFY 2007 will be Polonnaruwa and Hambantota districts.

5.2.2 RRDI, with the collaboration of the district soil testing laboratories will do the preparations for conducting tests of the soil samples of food crop growers' fields in different climate and soil type zones in Polonnaruwa and Hambantota districts.

5.2.3 A five day RA training for soil test will be conducted by RRDI.

5.2.4 Around 200 soil samples received from different climate and soil zones in Polonnaruwa and Hambantota districts will be completed in the second year (2007 Yala and 2007/2008 Maha seasons) by regional laboratories to be used for farmer trainings.

5.2.5 An illustrative extension brochures to be used for trainers training and farmers training on IPNS will be updated, prepared and produce sufficient number of copies by the executing agency of the section 1 of this RD.

5.2.6 A full day Trainer Training will be conducted by the Executing Agency for three (3) Subject Matter Specialist and thirty five (35) AI in the Polonnaruwa district and three (3) AD, one (1) Subject Matter Specialist, sixty one (61) AI in Hambantota district enabling them to become resource persons of the farmer training.

5.2.7 Half a day pilot training for AD, AI and farmers in different climate zones in the Polonnaruwa and Hambantota districts will be conducted by the Executing Agency of section 1 of this RD, as a trial test of the farmer training

5.2.8 Half a day farmer training, including lecture type and practice on IPNS will be conducted by AD and AI in all AI ranges in the Polonnaruwa and Hambantota districts for selected farmers at least three times a season.

5.2.9 The updated training manuals and curricular of IPNS will be prepared to be used for the Training Program by the Executing Agency mentioned in the section 1 of this RD.

5.2.10 A monitoring and evaluation of the First Year Training will be conducted by Executing Agency and assess the status objective achievement.

## 5.3 IN THE THIRD YEAR OF THE COOPERATION PERIOD (JFY 2008)

5.3.1 The target district for JFY 2008 will be Anuradhapura district.

5.3.2 RRDI, with the collaboration of the district soil testing laboratories will do the

preparations for conducting tests of the soil samples of food crop growers' fields in different climate and soil type zones in Anuradhapura district.

5.3.3 A five day RA training for soil test will be conducted by RRD1.

5.3.4 Around 200 soil samples received from different climate and soil zones in Anuradhapura District will be completed in the third year (2008 Yala and 2008/2009 Maha seasons) by regional laboratories to be used for farmer trainings.

5.3.5 An illustrative extension brochures to be used for trainers training and farmers training on IPNS\* including the increase of organic manure production and application will be updated, prepared and produce sufficient number of copies by the Executing Agency of the section 1 of this RD.

5.3.6 A full day Trainer Training will be conducted by the Executing Agency for five (5) AD two (2) Subject Matter Specialists and seventy six (76) AI in the Anuradhapura district enabling them to become resource persons of the farmer training.

5.3.7 Half a day pilot training program for AD, AI and farmers of three (3) AI ranges in different climate zones in the Anuradhapura district will be conducted by the Executing Agency of section 1 of this RD, as a trial test of the farmers training.

5.3.8 Half a day farmer training, including lecture type and practice on IPNS will be conducted by AD and AI in all AI ranges in the Anuradhapura district for selected farmers at least three times a season.

5.3.9 The updated training manuals and curricular of IPNS will be prepared to be used for the Training Program by the Executing Agency mentioned in the section 1 of this RD.

5.3.10 A monitoring and evaluation of the Second Year Training will be conducted by Executing Agency and assess the status objective achievement.

## 6. NUMBER OF TRAINEES AND FARMERS TRAINING WITHIN THE COOPERATION PERIOD

6.1 The number of participants for trainer training will be all AD and AI in the target district.

6.2 The farmer trainings will be conducted by the trained AI in his/her range in the target district and the number of training participants per one farmer training shall be maximum 30.

6.3 The number of farmer trainings shall be around 200 in each district per JFY with in the cooperation period.

6.4 Approximately 3,000 food crop growers will be obtain farmer training in a year during the JICA cooperation.

## 7. FARMER TRAINING SITE

7.1 The farmer training shall be held in a selected farmer's food crop growing field in an AI

275

£ 500

2 1/2

Am

range in target district.;

7.2 The selection of the farmer's food crop growing field should be agreed between the AD, AI, NFS, DOA, PDOA, RRDl and JICA.

## 8. CURRICULUM AND THE IMPLEMENTATION SCHEDULE OF THE TRAINING PROGRAM

8.1 Tentative Curriculum of the RA Training, Trainer Training and Farmer Training is attached in the Annex I.

8.2 The Implementation schedule of the First, Second and Third year is attached in the Annex II.

## 9. QUALIFICATIONS FOR TRAINING

### 9.1 Trainer Training

9.1.1 All AD, AI and other relevant researchers and responsible for extension of agriculture in the target district shall be eligible to obtain the trainer training.

### 9.2 Applicants for the farmer training should be;

9.2.1 A owner farmer, tenant farmer or lease farmer of food crop growing as a main enterprise of agriculture on commercial basis or for home consumption (male / female).

9.2.2 Eager to acquire rational methods of fertilizer application and able to share the knowledge and know-how with other farmers nearby.

9.2.3 Cooperate AI, AD, DOA, PDOA, RRDl, NFS etc. for implementation and evaluation of the Training Program.

9.2.4 To be in good health, both physically and mentally, in order to complete the field level training.

## 10. APPLICATION PROCEDURE

10.1 The Executing Agency will make arrangements to invite all AD, AI and other relevant researchers, extension of agriculture for the Trainer Training.

10.2 The Executing Agency will make arrangements to prepare and send the general information such as the selection criteria of participants, training objectives, methodology, materials etc. of the farmer training and prescribed application forms to the AD and AI in the target districts for selection of training participants at least one (1) month before the commencement of the farmer training.

10.3 The selection of the participants will be done by the AI with the cooperation of AD in target districts and shall send the list of selected participants to Executing Agency. Executing Agency will forward a copy of the list of training participants to JICA Sri

276

st

ah

arr

Lanka office not later than fourteen (14) days before the commencement of training course for necessary measures mentioned in the section 11-4. below.

**11. MEASURES TO BE TAKEN BY THE MAIN RELEVANT GOVERNMENT INSTITUTIONS OF SRI LANKA AND THE JICA**

**11.1 RRDI and Fertilizer Unit of the DOA and NFS of MOAD**

- 11.1.1 To formulate the curriculum and the training schedule based on ANNEX I and ANNEX II and the observations of the pilot training with the cooperation of AI, AD and other relevant authorities to assure effective and useful training to the participants.
- 11.1.2 To prepare the estimated cost of the Training Program, separately for each district, in the prescribed form and submit it to JICA Sri Lanka Office, approximately one (1) month before the commencement of training.
- 11.1.3 To arrange required number of staff, lecturers, instructors, transportation, practical sessions, training materials etc. to conduct the farmer trainings in each target district
- 11.1.4 To make all necessary arrangements to make timely available the results of the soil test of the soil sample of farmers food crop growing field in the target district enabling the farmer training on IPNS an effective and meaningful to the farmers.
- 11.1.5 To make necessary arrangements with the district Soil Laboratories of the target districts for conducting accurate and timely tests for standardized fertilizer applications under IPNS.
- 11.1.6 To coordinate with the AI and AD and other required departments and institutions for the implementation and evaluation of the Training Program.
- 11.1.7 To prepare a format to acquire feed back of the each field level training from AD and AI separately regarding the objective achievement and assessment of training after completion of each farmer training, and to make arrangements to obtain the same from AD and AI ten (10) days after completion of the training.
- 11.1.8 To evaluate the result of the Trainer Training for AD and AI.
- 11.1.9 To do the procedure for remittance of funds from JICA and to manage the funds to conduct the Training Program as specified in the section 13 below.
- 11.1.10 To submit a report on the implementation and achievements of the Training Program to JICA Sri Lanka Office together with the final statements of accounts.

**11.2 AD of target districts**

- 11.2.1 To formulate the farmer training schedule based on Annex I and Annex II with the cooperation of Executing Agency.
- 11.2.2 To coordinate and expedite all the procedures from selection of farmer training

277

2

320K

q h

As

participants up to the post evaluation in AI ranges in the district.

- 11.2.3 To coordinate and make arrangements to make available training materials, resource persons etc. to meet the objectives of the farmer training.
- 11.2.4 To make arrangements of the transportation of farmer training participants to and from the training sites if required with the funds allocated by JICA Sri Lanka office for the same purpose.
- 11.2.5 To release the resource persons such as lecturers, instructors etc. to conduct the training course as and when required.
- 11.2.6 To prepare the estimated cost of Training Program in the prescribed form approximately one (1) month before the commencement of the farmer training and submit to Executing Agency for onward transmission to JICA Sri Lanka Office.
- 11.2.7 To monitor the practice of IPNS by the farmers after the training and feed back to Executing Agency to consult with JICA Sri Lanka Office.
- 11.2.8 To prepare a report on the implementation of farmer trainings by AI s in the district and submit the same to Executing Agency within ten (10) days after completion of the farmer trainings.

### 11.3 AI of target districts

- 11.3.1 To be a resource person to conduct the training at selected farmer's field in accordance with the guide lines provided by the Executing Agency.
- 11.3.2 To take budgetary management measures to cover the cost of the farmer training as per the approved cost estimate.
- 11.3.3 To participate actively in Trainers Training and pilot training programs arranged by the Executing Agency.
- 11.3.4 To keep records about training participants, their achievements, constrains etc. and share them with Executing Agency.
- 11.3.5 To submit required reports as requested by Executing Agency through AD s with regard to the farmer trainings.
- 11.3.6 To conduct the farmer training for selected participants to achieve the training objectives set by the Executing Agency.

### 11.4 JICA Sri Lanka Office

- 11.4.1 To provide necessary guidance to conduct and manage the Training Program.
- 11.4.2 To provide funds agreed between Executing Agency and JICA Sri Lanka Office based on the estimated cost to conduct the Training Program. The tentative estimate is given in the Annex III.
- 11.4.3 JICA Sri Lanka Office shall remit total amount of approved cost of training to the official bank account of the NFS before three (3) weeks of the commencement of

278

£

331

9h

As

the Training Program.

11.4.4 To co-operate and coordinate with the Executing Agency for necessary follow-up of the Training Program.

11.4.5 To provide equipments and the services of the Japanese experts necessary for the implementation and follow-up the Training Program if necessary after the negotiation with the Executing Agency and JICA.

## 12. PROCEDURE FOR REMITTANCE AND EXPENDITURE

12.1 NFS will open an official bank account in Sri Lanka to receive the funds remitted by JICA Sri Lanka Office, and inform JICA Sri Lanka Office of the name of the bank, the account code number and the name of the account holder etc.

12.2 NFS shall submit the estimate of expenses with regard to the first year trainings, and material preparation, separately for each district, to the JICA Sri Lanka Office in the prescribed form not later than thirty (30) days before the commencement of the Training Program.

12.3 JICA Sri Lanka Office will assess the estimate of expenses received from the NFS and remit the approved total amount of expenses to the respective accounts mentioned in section 12-1 and 12-2 above within fifteen (15) days after the receipt of the estimate of expenses.

12.4 NFS will submit a statement of actual expenditure together with copies of receipts to prove the expenses, to JICA Sri Lanka Office within fifteen (15) days after the termination of each training in each district.

12.5 If there is any unspent remainder of the amount remitted by JICA Sri Lanka Office, the NFS will reimburse that unspent amount to JICA Sri Lanka Office in accordance with the advice given by JICA Sri Lanka Office.

12.6 The funds allocated for each item of expenses shall not be appropriated for other item of expenses or any other purposes.

12.7 NFS will hold and preserve the originals of all receipts and documents to prove the utilization of JICA funds for almost ten years.

12.8 When requested by JICA, NFS will make available all the original receipts and other documentary evidence necessary to verify the expenditures stated in 11-4 above for JICA reference.

## 13. OTHERS

This attached document and the following Annexes attached hereto shall be deemed to be part of the Record of Discussions:

279

2

ss

al

as



ANNEX I: Tentative Curriculum of the Research-Assistant Training, Trainer Training and Farmer Training

ANNEX II: Implementation Schedule of the Training Program

ANNEX III: Tentative Estimate of Expenses

ANNEX IV: Project Design Matrix (PDM)

280  $\frac{1}{2}$

50%

ah

As

## ANNEX I Tentative Curriculum

### Curriculum for Research Assistants (RA)

1. Lab recording
2. Soil sample preparation for analysis
3. Soil sample storage
4. Preparation of solutions
5. Extraction procedures
6. Extraction of different nutrients
7. Analysis of different nutrients using scientific equipments.
8. Principles of analysis
9. Principles of different analytical instruments
10. Maintenance and service of lab equipments
11. Laboratory safety procedures

### Curriculum for Trainer Training (AD and AI)

1. Introduction
  - Definition
  - Soils in the district
  - Important of different soil parameters to the plant nutrients
  - Impotence of balanced fertilizer use
  - Soil test based fertilizer use
  - Cropping systems in the area
  - Methods and practices
  - Nutrient balance sheets
  - Economics
2. IPNS for paddy
  - Cultural practices
  - Seasonal cultivation
  - Land preparation
  - Irrigation
  - Weed management
  - Pest management
  - Other cultural practices
  - Harvesting

28 1/2

50X

9 h

Qz

- Organic manure
- Different sources of organic manure available and their nutritive values
- Incorporation of organic manure
- Economics of organic manure
- Recommendation for organic manure
- Chemical fertilizers for paddy
- Recommendations
- Economics
- Importance of bio fertilizers
- N and P

### 3. IPNS for vegetable based cropping systems

- Cultural practices
- Seasonal cultivation
- Land preparation
- Irrigation
- Weed management
- Pest management
- Other cultural practices
- Harvesting
- Organic manure
- Different sources of organic manure available and their nutritive values
- Incorporation of organic manure
- Economics of organic manure
- Recommendation for organic manure
- Chemical fertilizers for paddy
- Recommendations
- Economics
- Importance of bio fertilizers
- N and P bio fertilizers

### 4. Guide lines for lay out of IPNS Demonstrations/ Trials in the field

- Site selection
- Selection of farmers
- Laying out of trials/Demonstrations
- Farmer training
- Conducting Field days

5. Preparation of a IPNS program for two years for districts/ AI ranges

Objectives

Activities

Budget

Time frame

Outcomes

Reporting (output)

Curriculum for Farmer Training

(to conduct before commencement of the season)

1. Introduction of IPNS concepts

Importance of IPNS

2. IPNS for Paddy

Cultural practices

Organic fertilizers

Chemical fertilizers

3. IPNS for Vegetables

Cultural practices

Organic fertilizers

Chemical fertilizers

(To conduct in the middle of the season)

1. Importance of cultural practices

2. Pest and disease control

3. Storage

4. Maturity index

5. Post harvest Handling

(At the field day)

1. Learning every thing about IPNS

2. Evaluation of IPNS

3. Adoption of IPNS

283 ~~2~~ 507

al As



## ANNEX III Tentative Estimate of Expenses

<First Year>

Contents	Amount	Details
1. Baseline Survey	100,000	
2. Soil Test		
(1) Equipment, Chemicals	2,500,000	
(2) Transportation	100,000	
(3) AI Soil Test	100,000	Rs.1,000 x 100 AI
3. Research Assistant Training	100,000	
4. Trainer Training		
(1) Training Cost	25,000	
(2) Manual	30,000	Rs.300 x 100 AI
5. Pilot Training	75,000	Rs.25,000 x 3 AI
6. Farmer Training		
(1) Training	600,000	Rs.100 x 30 Farmers x 100 AI x 2 times x 1 season
(2) Field Day	500,000	Rs.100 x 50 Farmers x 100AI x 1 time x 1 season
(3) Demonstration	500,000	Rs.5,000 x 100 AI x 1 time x 1 season
(4) Brochure	60,000	Rs.20 x 30 Farmer x 100 AI
(5) Travel	100,000	
7. Allowance for Resource Person	200,000	
8. Miscellaneous	10,000	
Total	5,000,000	

285

*Handwritten signature and initials*

<Second Year>

Contents	Amount	Details
1. Baseline Survey	100,000	
2. Soil Test		
(1) Equipment, Chemicals	800,000	
(2) Transportation	100,000	
(3) AI Soil Test	100,000	Rs.1,000 x 100 AI
3. Research Assistant Training	100,000	
4. Trainer Training		
(1) Training Cost	25,000	
(2) Manual	30,000	Rs.300 x 100 AI
5. Pilot Training	75,000	Rs.25,000 x 3 AI
6. Farmer Training		
(1) Training	1,200,000	Rs.100 x 30 Farmers x 100 AI x 2 times x 2 season
(2) Field Day	1,000,000	Rs.100 x 50 Farmers x 100AI x 1 time x 2 season
(3) Demonstration	1,000,000	Rs.5,000 x 100 AI x 1 time x 2 season
(4) Brochure	60,000	Rs.20 x 30 Farmer x 100 AI
(5) Travel	100,000	
7. Travel for Monitoring	100,000	
8. Allowance for Resource Person	200,000	
9. Miscellaneous	10,000	
Total	5,000,000	

Ar

rk

<Third Year>

Contents	Amount	Details
1. Baseline Survey	100,000	
2. Soil Test		
(1) Equipment, Chemicals	800,000	
(2) Transportation	100,000	
(3) AI Soil Test	100,000	Rs.1,000 x 100 AI
3. Research Assistant Training	100,000	
4. Trainer Training		
(1) Training Cost	25,000	
(2) Manual	30,000	Rs.300 x 100 AI
5. Pilot Training	75,000	Rs.25,000 x 3 AI
6. Farmer Training		
(1) Training	1,200,000	Rs.100 x 30 Farmers x 100 AI x 2 times x 2 season
(2) Field Day	1,000,000	Rs.100 x 50 Farmers x 100AI x 1 time x 2 season
(3) Demonstration	1,000,000	Rs.5,000 x 100 AI x 1 time x 2 season
(4) Brochure	60,000	Rs.20 x 30 Farmer x 100 AI
(5) Travel	100,000	
7. Travel for Monitoring	100,000	
8. Allowance for Resource Person	200,000	
9. Miscellaneous	10,000	
Total	5,000,000	

287

sat

ak

By



ANNEX IV Project Design Matrix (PDM)

Project Name: Promotion of Integrated Plant Nutrition Practice among Farmers for Sustainable Improvement of Crop Productivity and Alleviating Poverty  
 Target Area: Kyunegala, Polonnaruwa, Hambantota, Anuradhapura  
 Period: from August 2008 to March 2009  
 Target Group: AD, AI, and food crop growers in each target district.

Narrative summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p><b>(Overall Goal)</b>                      The Project is to contribute for alleviating poverty in agricultural areas.</p>	<p>Increase of income of food crop growers by reducing cost of production of food crops</p>	<p>Field level monitoring of food crop production</p>	
<p><b>(Project Purpose)</b>                      The Project is to promote the Integrated Plant Nutrition System (IPNS) among food crop growers in major paddy and other food crop growing districts.</p>	<p>Application rate of new practices                      Unit cost of production of food crops                      Usage of the amount of organic and inorganic fertilizer per unit area                      Changing pattern of farming practices</p>	<p>Monitoring of food crop growers                      Monitoring of food crop growers                      Monitoring of food crop growers                      Monitoring of food crop growers</p>	<p>The price of food crops is not declined suddenly.</p>
<p><b>(Outputs of the Project)</b>                      1. Dissemination of knowledge and skill on IPNS of Assistant Directors (AD) and Agriculture Instructors (AI) to the food crop growers will be strengthened and improved.                      2. The confidence and ability of application of IPNS by food crop growers will be improved and diffused among food crop growers.</p>	<p>No. of workshop conducted                      No. of participants for workshop                      No. of training conducted                      No. of participants for training                      Score of evaluation test                      Training Achievement</p>	<p>Training log book                      Training log book                      Training log book                      Questionnaire to food crop growers                      Questionnaire to food crop growers</p>	<p>No break out of devastating diseases                      No severe drought</p>
<p><b>(Activities)</b>                      1-1 Conduct the soil test of the soil samples of food crop growers' field.                      1-2 Conduct the training for Research Assistant (RA) on soil test.                      1-3 Prepare the illustrative extension brochures to be used for training.                      1-4 Conduct the baseline survey on food crop growers.                      1-5 Conduct the pilot training for AD and AI on IPNS.                      1-6 Monitor and evaluate of trained food crop growers by AD and AI.                      2-1 Conduct the food crop growers training including lecture type and practice on IPNS.                      2-2 Conduct the field day to demonstrate the advantages of IPNS to the food crop growers after harvesting.</p>	<p>Input                      (by Sri Lankan side)                      Rental fee of facility for training                      Travel expenses &amp; lecture fee for internal instructors                      Miscellaneous expenses (cost share)</p>	<p>AD and AI continuously engaged in their job                      Trained farmers continuously engaged in farming</p>	<p>Preconditions                      Market of food crop growers doesn't collapse                      Maintenance of peace and order in each target areas will be favorable</p>

主要關係者連絡先 (2009.03)

National Coordinator:

Dr.W.M.A.D.B.Wickramasinghe

National Coordinator of IPNS Project

Natural Resources Management Center, Department of Agriculture,

P.O.Box 52, No. 05, Saeasawi Mawatha, Peradeniya

Tel: 081-2388355 Fax: 081-2388355

NFS:

Mr. Ranjan Dharmawardhana

Director

Nation Fertilizer Secretariat

“Govujana Mandiraya”

No.80/5, Rajamalwatte Avenue,

Battaramulla

KRDI:

Dr. W.M.J.Bandara

Senior Soil Scientist

Rice Research & Development Institute

Batalagoda, Ibbagamuwa

Tel: 037-2259881

FU:

Dr. Jayantha Atapattu

Assistant Director of Agriculture

Fertilizer Unit, Department of Agriculture, Peradeniya

Tel:081-2388229

Kurunegala:

Mr. Kithsiri

Deputy Director of Agriculture (Extension)

Office of the Deputy Director of Agriculture (Extension)

Dambulla Road, Kurunegala

Tel:037-2223100

Polonnaruwa:

Mr. R.P.Upali

Deputy Director of Agriculture (Inter-Provincial)

Office of the Deputy Director of Agriculture (Extension)

Polonnaruwa

Tel : 027-2222019 Fax: 027-2222019

Hambantota:

Mr. C.Nanayakkara

Deputy Director of Agriculture

Office of the Provincial Director of Agriculture of Southern Province

Hambantota

Tel: 047-2220791

Mr. W.L.Hiran Peiris

Deputy Director of Agriculture (Inter-Provincial)

Hambantota

Tel: 047-2220791

Anuradhapura:

Mr. I.W.K.Imbulgoda

Assistant Director of Agriculture (Inter-Provincial)

Anuradhapura

Tel: 025-2223308

Mr. R.P.Mahindapala

Office of the Deputy Provincial Director of Agriculture (Extension)

Provincial Department of Agriculture,

North Central Provincial Council,

Anuradhapura

IPNS 終了時評価

説明資料

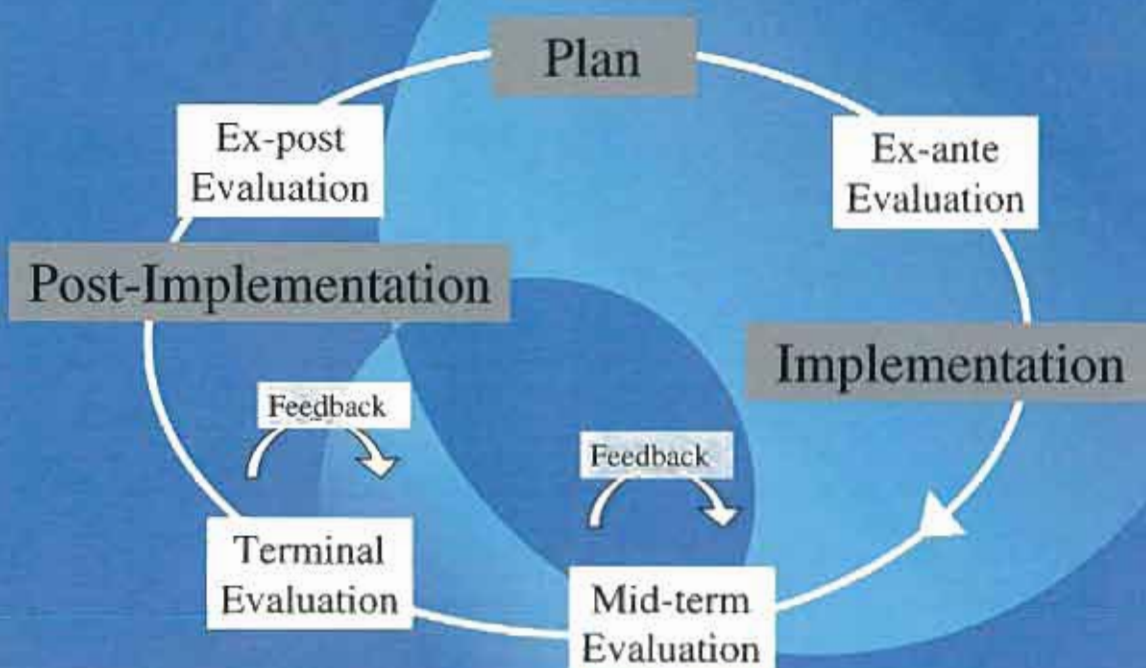


# Project Evaluation

JICA Sri Lanka Office  
YUASA Keiichiro



## JICA's Project Cycle



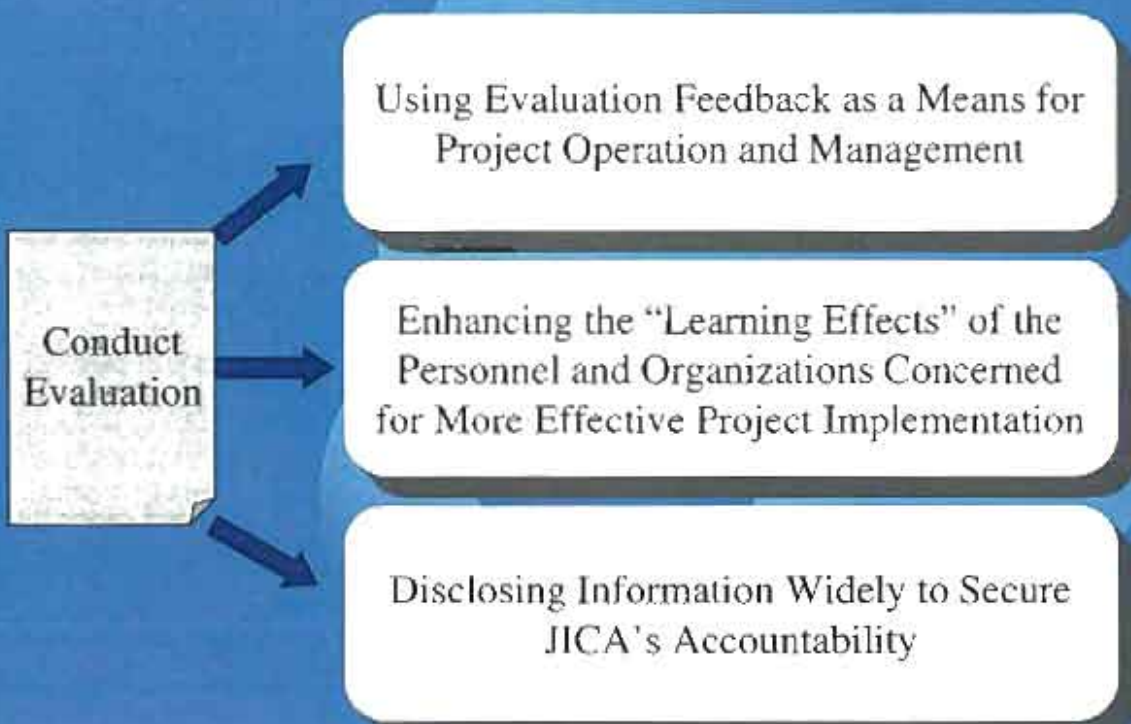


## Types of M&E within JICA's Project Cycle

- Ex-ante Evaluation
- Monitoring
- Mid-term Evaluation
- ***Terminal Evaluation***
- Ex-post Evaluation



## Why Evaluation Important?



## **jica** 3 Phases of JICA Evaluation

1. Assessment of performance
2. Value judgment based on “Five Evaluation Criteria”
3. Making recommendations and lessons-learned; and feedback

## **jica** Assessment of Performance

### **Project results**

- Achievement of objectives, effects and impact
- Inputs, outputs delivered

### **<Causal linkage>**

- Causal relationship between the effects and the project

### **Implementation process**

- Various incidents during implementation process
- Management of activities, perception of stakeholders, communication processes, etc.



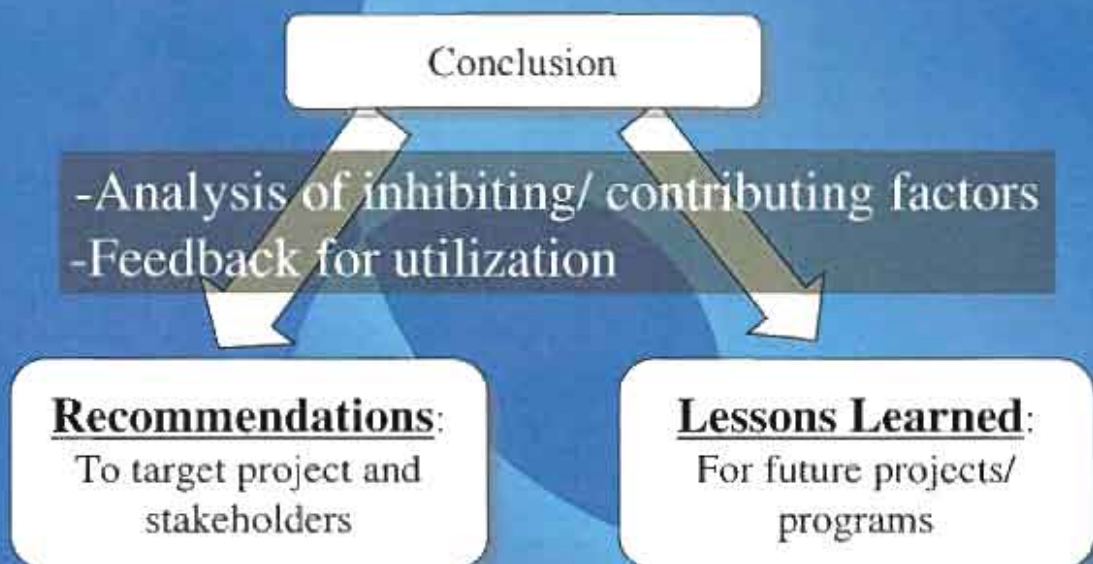
## Value judgment based on 5 Evaluation Criteria

- **Relevance**
- **Effectiveness**
- **Efficiency**
- **Impact**
- **Sustainability**

Conclusion:  
Judgment  
Successful/Unsuccessful  
and Why?



## Recommendations, Lesson- Learned and Feedback





# Terminal Evaluation of IPNS Project

## Main Components of Terminal Evaluation Report

- Project Performance & Implementation Process
- Evaluation Result (based on DAC criteria)
  - Relevance
  - Effectiveness
  - Efficiency
  - Impact
  - Sustainability
- Conclusion
- Recommendation & Lessons Learned

## Information Sources & Methods

- NFS, FU, RRD, JICA
  - By questionnaire
- Local Offices, AI and other Field Officers
  - By interviewing
- Farmers
  - By interviewing
- Existing Documents  
(R/D, Reports, Agriculture Policy, Agricultural Campaigns, Newspaper articles etc.)
  - By reviewing

## Interview

- Project sites : 6  
Kurunegala(P), Polonnaruwa(IP),  
Hambantota(P, IP), Anuradhapura(P, IP)
- Person to be interviewed (per site)  
Director & Deputy Director of Local Offices  
approx. 5 selected AI & field officers  
approx. 10 selected farmers

## Schedule of the Evaluation

- Today : Kick off
- Until 1<sup>st</sup> week of Feb. : Doc. Review and Preparation
- 2<sup>nd</sup> – 3<sup>rd</sup> week of Feb. : Interview & Questionnaire
- 4<sup>th</sup> week of Feb. : Compiling results  
+ Data up to 2008-2009 Maha (incl. Budgetary data)
- 2<sup>nd</sup> week of March : Finalize evaluation
- End of March 2009 : Completion of the Project

## PDM Narrative Summary

### Overall Goal

The Project is to contribute for alleviating poverty in agricultural areas.

### Project Purpose

The Project is to promote the IPNS among food growers in major paddy & other food crop districts.

### Outputs

1. dissemination of knowledge & skills on IPNS of AD & AI to the food crop growers will be strengthened & improved.
2. The confidence & ability of application of IPNS by food crop growers will be improved & diffused among food crop growers

### Activities

Soil test, Trainings, Field Day, Brochures, Monitor etc.

## Objectively Verifiable Indicators

### Overall Goal

The Project is to contribute for alleviating poverty in agricultural areas.

### Indicators

Increase of income of food crop growers by reducing cost of production of food crops

## Objectively Verifiable Indicators

### Project Purpose

The Project is to promote the IPNS among food growers in major paddy & other food crop districts.

### Indicators

- Application rate of new practices
- Unit cost of production of food crop
- Usage of the amount of organic & inorganic fertilizer per unit area
- Changing pattern of farming practices

## Objectively Verifiable Indicators

### Outputs

1. dissemination of knowledge & skills on IPNS of AD & AI to the food crop growers will be strengthened & improved.
2. The confidence & ability of application of IPNS by food crop growers will be improved & diffused among food crop growers

### Indicators

- No. of workshop conducted
- No. of participants for workshop
- No. of training conducted
- No. of participant for training
- Score of evaluation test
- Training achievement

## To check “Project Performance”

- Survey items
  - Achievement of Inputs (Actual / Planned)
  - Achievement of Outputs (indicators)
  - Application rate of IPNS practice
  - Change of unit cost of food crop production
  - Change of use of organic / inorganic fertilizer
  - Change of farming practice pattern
  - Perspective for achievement of Overall Goal
  - Others

## To check “Implementation Process”

- Survey items
  - Achievement of Activities (Actual / Planned)
  - Management & Operation of the overall project
  - Method of training
  - Attitude of trainees
  - Any impediments to implementation process
  - Others

## To evaluate “Relevance”

- Survey items
  - Consistency of the project purpose to the Sri Lankan policy
  - Needs of trainees (High?)
  - Number of trainees (Appropriate?)
  - Consistency to Japan’s ODA policy
  - Manner as the ODA project (Appropriate?)
  - Others

## To evaluate “Effectiveness”

- Survey items
  - Achievement of Project Purpose
  - Quality of trainings & Ability of trainers
  - Ability of trainees (increased?)
  - Use of equipment provided
  - Any other matters contribute to the purpose
  - Any impediments to Effectiveness
  - Others

## To evaluate “Efficiency”

- Survey items
  - Achievement of Outputs
  - Input (items, quantity, timing) (Appropriate?)
  - System of project management
  - Training facilities (Appropriate?)
  - Cost
  - Any impediments to Efficiency
  - Others

## To evaluate "Impact"

- Survey items
  - Any increase of income of food crop growers with IPNS practices (to achieve Overall Goal)
  - Any other impacts (positive/negative) caused by IPNS practices

### *"Overall Goal (from PDM)"*

*The Project is to contribute for alleviating poverty in agricultural areas.*

## To evaluate "Sustainability"

- Survey items
  - Any practice of IPNS done after JICA support
  - Numbers of good examples (by farmers) of IPNS
  - Measures taken by Provincial & Inter-Provincial office to continue IPNS practice after JICA support
  - Measures taken by Provincial & Inter-Provincial office to monitor the application of IPNS
  - Measures taken by Provincial & Inter-Provincial office to diffuse good practice of IPNS
  - Any other future supports by the Government (Technical & Institutional)



Asking for your cooperation,

Thank you.

プロジェクト活動レポート (Draft)

## Final Report on IPNS/ JICA Programme

**1. Project Name.** In country Training programme on Promotion of Integrated Plant Nutrition System (IPNS) among Farmers for Sustainable Improvement of Crop Production and Alleviation of Poverty.

### **2. Introduction:**

Studies have shown that the depletion of soil fertility in farm fields practically among rice farmers is one of the key factors for their low agricultural productivity. This low agricultural productivity leads to poverty among farming community. In addition to that Sri Lanka spends a colossal sum of foreign exchange to import its fertilizer. The fertilizer subsidy scheme alone for paddy is around Rs 35 billion in 2008. The fertilizer prices are increasing every year and continue to rise. Therefore, fertilizer should be managed efficiently to reduce the cost of production, increase the productivity while minimum damage to environment. Studies have shown that Integrated Plant Nutrition System (IPNS) is the best method to achieve the above objectives. Therefore, by implanting IPNS practice among rice growing farmers, it is expected to increase the soil fertility and productivity of the agricultural lands, increase yields while reducing the cost of production, and thereby increasing farm income while alleviating the poverty.

JICA / MOAD in country training programme on IPNS practices was initiated during Maha 2006/07 season and ended on 31<sup>st</sup> March 2009 at the end of the Maha 2008/09 season. This programme was implemented in four districts, namely Kurunegala, Polonnaruwa, Hambantota and Anuradhapura for the period of three years. During the first year the programme was implemented in Kurunegala district in Maha 2006/07 and Yala 2007 season, followed by Polonnaruwa in Yala 2007 and Maha 2007/08 Maha season. In Hambantota districts the programme was implemented during Maha 2007/08 and Yala 2008 season. Finally the programme was implemented in Anuradhapura during Yala 2008 and Maha 2008/09 season. Programme was implemented in rice and rice based cropping systems in all districts. Except Polonnaruwa district where all the rice lands belong to major irrigation scheme, rest of the district the programme was implemented both in major and minor or rainfed rice or rice based cropping systems.

### **3. General Objectives:**

Sustainable Improvement of Crop Production and Alleviation of Poverty among farming community in rice and rice based cropping systems.

### **4. Specific objectives**

- I. Re-ascertain the benefit of IPNS techniques and application of IPNS practices
- II. Strengthen the dissemination of knowledge and skills on IPNS to food crop growers
- III. Develop confidence and ability of application of IPNS by food crops growers and diffusion of techniques in major food crops growing areas and application of IPNS practices

### **5. Executing agencies and responsibilities**

- I. JICA – Financial assistant
- II. National Fertilizer Secretariat – Coordination at Ministry level
- III. Department of Agriculture
  - i. RRDI
    - a. Coordination of the project activities
    - b. Training of Trainers
    - c. Development of Best Management Practices (BMP)
    - d. Implementation of IPNS practices and new fertilizer recommendation based on Biological Soil Test Kit with extension staff

- e. Monitoring of the soil fertility improvement
  - f. Development of a GIS data base
  - ii. Extension and Training division
    - a. Implementation of programme at Inter provinces (Anuradhapura, Polonnaruwa and Hambantota districts) through Deputy Director of Agriculture of respective districts
  - iii. Fertilizer unit
    - i. Preparation of leaflets on IPNS practices
    - ii. Development of IPNS training manual and IPNS curriculum
- IV. Provincial Department of Agriculture
- i. Implementation of programme in provincial extension area of the following districts in the provinces
    - a. North Western Province- Kurunegala district
    - b. North Central Province – Anuradhapura district
    - c. Southern Province - Hambantota district

## 6. Activities implemented

Following activities have been identified and agreed to be implemented in the selected areas by the respective organizations.

Activity	Responsibility
1. Field test of new fertilizer recommendation based on Biological Soil Test Kit(BST kit)	
a. Training of RA for laboratory analysis	RRDI
b. Training of PD,DD, AO,ADA AI for new fertilizer recommendation technique BST kit	RRDI
c. Preparation of field biological soil test kit	RRDI
2. Identification of Yaya and farmers	DOA (Inter-provincial) and PDOA
3. Collection of soil samples	(Inter-provincial) and PDOA
4. Analysis of soil samples	RRDI
5. Preparation of Biological Soil Test Kits and Site specific fertilizer recommendation	RRDI
6. Carryout biological soil test	DOA (Inter-provincial) and PDOA
7. 1 <sup>st</sup> farmer Training programme	DOA (Inter-provincial) and PDOA
8. 2 <sup>nd</sup> Farmer training programme	DOA (Inter-provincial) and PDOA
9. Implementation of IPNS practices ½ ac	DOA (Inter-provincial) and PDOA
10. Field training classes and field days	DOA(Inter-provincial) and PDOA
11. Preparation of training manual and curriculum	Fertilizer Unit
12. Preparation of extension brochures on IPNS	Fertilizer Unit
13. Incentives for organic manure production	Fertilizer unit

## 7. Implantation of the project

### 7.1 Training of Research Assistants (RA)

A training programme was held at the Rice Research and Development Institute (RRDI) to train Research Assistants attached to different research Institute/Centers of the Department of Agriculture and University of Peradeniya. Altogether 26 trainees were selected to represent above organizations. The programme consisted of soil sample collection, preparation of soil sample for analysis, soil analysis, and analytical report preparation, and instrument maintenance, formulation of fertilizer recommendation, preparation and carrying out Biological Soil Test kit.

## 7.2 Training of Trainers (PD,DD, AO,ADA AI)

The objective of the training programme was to train the field officers to be acted as resource persons at field level. Training of trainers was done by the officers of RRDI. In this programme, trainers were trained on the concept of IPNS, Site Specific fertilizer recommendation, Soil Test Based fertilizer application, Soil sample collection and preparation for analysis, Preparing and Conducting Biological Soil Test Kit, Conducting baseline survey for collection of information etc. Both Kurunegala and Polonnaruwa districts training programmes were conducted at RRDI, Batalagoda and 104 officers from Kurunegala and 68 from Polonnaruwa participated at the programme respectively. Training programme for Hambantota officers was conducted at the In-service Training Institute, Angunakolapelessa and 76 officers from both Interprovincial and Provincial department of Agriculture were participated at the programme. Anuradhapura training programme was conducted at the In-service Training Institute at Mahailuppallama and 83 officers participated at the programme from both Interprovincial and Provincial Department of Agriculture. Officers of all levels attended the training programme.

## 7.3 Collection of Soil Samples, Analysis of Soil Samples, Preparation of Soil Test Reports and Biological Soil Test Kits.

After each Training of Trainer programme, a discussion was held to finalize the implementation methodology and each AIs were assigned to organized 2-3 IPNS yayas in their area consisting a cluster of 25-20 farmers in each yaya. In each yaya, two farmers were selected to implement the IPNS practices and ½ ac demonstrations. Altogether there were 171 contact farmers in Kurunegala district, 183 in Polonnaruwa district, 176 in Hambantota district and 183 in Anuradhapura district. Their soil samples were collected by the AI of the range and they were dispatched to RRDI for rest of the work. These soil samples were analyzed, soil test reports and fertilizer recommendation were prepared and hand over back to respective farmers through AI with the Biological Soil Test Kit. The Biological Soil Test kits for each of these farmers were prepared based on soil test reports at RRDI, Batalagoda and implemented using Biological Soil Test kit with respective farmer and AI participation. RRDI prepared 613 Biological Soil Test Kits and distributed among contact farmers.

## 7.4 Implementation of Training Programmes and Field Demonstration

### a. Kurunegala District

The project activities for Kurunegala district was commenced during Maha 2006/07 and continued during Yala 2007 season. Since the whole area is under Provincial Agriculture setup, North Western Province Agriculture Department was entrusted to implement the programme in Kurunegala district. In the district, there are three different distinct rice growing systems as follows and the programme was implemented in all the systems.

- I. **Major irrigation scheme** and rice/rice system in the main cropping pattern. Farmers in this system have an assured water supply during both yala and maha seasons.
- II. **Minor irrigation system.** In this system, farmers cultivate their crops using water in small tanks. There are about 3250 small tanks in Kurunegala district. The main crop during maha is rice and during yala season they cultivate rice or other crops depending on the water availability in the tank.
- III. **Rainfed system-** In this system, farmers uses direct rain to cultivate their crops. They cultivate rice or other crops depending on the rain.
- IV.

### 1. Farmer Training Programmes

#### a. First Training programme

Altogether 65 no of farmer training programmes were conducted in the first round and 1425 farmers attended the training programmes. The curriculum for the first training

programme was on important of different plant nutrients, use of balance fertilizer, and important of organic manure use in rice cultivation.

#### b. Second Training programme

The second training programme was conducted after conducting the Biological Soil Test kit. Altogether 61 farmer training programmes conducted at this level and 1251 farmers participated at the training programmes. With the help of the results of the biological soil test kit, farmers were educated to use of balanced fertilizer, fate of rice plants when plant nutrients are deficient, important of application of all plant nutrients and application of organic manure to provide micronutrients. Also, Farmers were educated for the fertility status of their fields.



Biological Soil Test (Manapaha)



Field day (Nikaweratiya)

#### c. Field days

Seventeen field days were carry out to show the importance of IPNS at field level and the forum was used to answer practical problems encountered during the implementation of IPNS practices. Altogether, 276 farmers attended these field days.

#### Evaluation

##### Comments by Farmers

- i. Biological soil test kit method is a good method to identify nutrient deficiencies
- ii. Learned that there are other nutrients other than NPK
- iii. Identify the problems of improper use of fertilizer
- iv. Need to keep the pots more than three weeks to show very good results
- v. This method is very useful and reduced the cost of unnecessary fertilizer application
- vi. Had new experience in carrying out own fertilizer tests
- vii. It's useful if all the farmers can get their fields tested by this method
- viii. Learned about the important of using recommendad fertilizer
- ix. Its better if the pots are larger (**But this would create technical problems by not creating necessary symptoms**)
- x. Like to continue the programme
- xi. Came to know about the use of organic manure in supplying micronutrients.
- xii. Gained a good knowledge about the soils in the yaya
- xiii. It's better if the irrigation water from the field is used for the pot experiment.

##### Comments by Officers

- i. Further awareness about the programme for farmers as well as officers
- ii. Good method to show the nutrient deficiencies and the programme should be continued
- iii. Reduce the number of plants in a pot. ( But this would create technical problem as more plants are needed to create deficiency symptoms within short time)
- iv. Need to keep plants more than 3 weeks to get symptoms
- v. Conduct two tests , one at AI's office and the other in farmers' field
- vi. Participation of an officer from RRDI, Batalagoda for every training programme.

- vii. Need to have test results before the season
- viii. Need equipment for soil sampling
- ix. Better to use irrigation water from farmer field than the water from the well
- x. Conduct field test in farmer fields after biological test. **(In fact this is part of the programme)**
- xi. Conduct Biological Soil Test for all the farmer fields
- xii. Incorporate OM treatment for the biological test.

#### **b. Polonnaruwa District**

The project activities of Polonnaruwa district was commenced during the yala 2007 season and continued during maha 2007/08 season. The District has 4 major irrigation schemes and 8 Agrarian Service Centers, and the programme was implemented to cover all 4 irrigation schemes and Bakamuna in Mahaweli area representing all ASC.

#### **1. Officer Training Programme**

In addition to initial training programme, two officer training programmes were conducted one at Hingurakgoda and another at ADA office Polonnaruwas to further educate the Officers on IPNS and conducting BST kit. 35 officers and 32 officers attended the programme respectively.



Officer Training Programme at Hingurakgoda

#### **2. Farmer Training Programmes**

##### **a. First Training programme**

Sixty farmer training programmes were planned and 43 programmes were conducted during yala season. Due to time limitation, initial training programme could not be conducted. However more programmes were conducted during maha season and altogether 135 farmer training programmes were conducted in the first round and 1240 farmers attended the training programmes. The curriculum for the first training programme was on important of different plant nutrients, use of balance fertilizer, and important of organic manure use in rice cultivation.

##### **b. Second Training programme**

The second training programme was conducted after conducting the Biological Soil Test kit. Altogether 244 farmer training programmes conducted at this level and 1608 farmers participated at the training programmes. With the help of the results of the biological soil test kit, farmers were educated to use of balanced fertilizer, fate of rice plants when plant nutrients are diffident, important of application of all plant nutrients and application of organic manure to provide micronutrients. Also, Farmers were educated for the fertility status of their fields.



Farmer Training programme at Sewagama



Farmer Training Programme at New Town

### 3. Half an acre demonstration plot

Forty three 1/2 ac. IPNS demonstrations were conducted during Yala 2007 season and another 124 during maha season. The average yields of these yayas were around 5 t /ha and implementation of IPNs practices increased the rice yield ranging from 6.5 t/ha to 7.5 t/ha. In one occasion, 9 t/ha rice yield have been given with implementation of IPNs practice. Application of organic manure would have supplemented some of the micronutrient requirement.



Field day at Demonstration in Medirigiriya

### Summary of Farmer Training programmes and Field days during Yala 2007 season.

AC centre	No of Training classes	Participation	Marks Obtained		No of Field days	Participation
			Before	After		
Palugasdamana	06	69	26	70	05	103
New Town	14	199	25	65	04	150
Sewagama	03	41	30	75	03	84
Hingurakgoda	05	58	30	68	02	56
Galamuna	04	55	30	70	01	32
Giritale	02	40	33	78	02	44
Minneriya	04	75	32	80	05	105
Bakamuna	01	23	28	65	01	21
<b>TOTAL</b>	<b>39</b>	<b>560</b>	<b>29</b>	<b>71</b>	<b>23</b>	<b>595</b>

### c. Hambantota District

The project activities of Hambantota district was commenced during the Maha 2007/08 season and continued 2008 yala season. The district has interprovincial and provincial agriculture extension systems and the programme was carried out in both the systems.



## 1. Farmer Training Programmes

### a. First Training programme

Altogether 44 no of farmer training programmes were conducted in the first round and 1425 farmers attended the training programmes. The curriculum for the first training programme was on important of different plant nutrients, use of balance fertilizer, and important of organic manure use in rice cultivation.

### b. Second Training programme

The second training programme was conducted after conducting the Biological Soil Test kit. Altogether 44 farmer training programmes were conducted under Interprovincial setup at this level and 1251 farmers participated at the training programmes. Under Provincial setup 112 training programmes were planned and conducted 52 training programmes. With the help of the results of the biological soil test kit, farmers were educated to use of balanced fertilizer, fate of rice plants when plant nutrients are diffident, important of application of all plant nutrients and application of organic manure to provide micronutrients. Also, Farmers were educated for the fertility status of their fields.

## 2. Field Day

In provincial setup 56 field days were targeted and conducted 27 training programmes. Under interprovincial set up 44 field days was planned but completed only 16.

### d. Anuradhapura District

The project activities at Anuradhapura district was commenced during the Yala 2008 season and continued during maha 2008/09 season. The District consists of both interprovincial and provincial system and the programme was implemented in both systems.

#### 1. Farmer Training Programmes

##### a. First Training programme

Altogether 100 no of farmer training programmes were planned and 86 were conducted under inter provincial in the first round and 3425 farmers attended the training programmes. Under provincial set up 192 programmes were planned and 125 were conducted. The curriculum for the first training programme was on important of different plant nutrients, use of balance fertilizer, and important of organic manure use in rice cultivation.

##### b. Second Training programme

The second training programme was conducted after conducting the Biological Soil Test kit. Altogether 61 farmer training programmes conducted at this level and 1251 farmers participated at the training programmes. With the help of the results of the biological soil test kit, farmers were educated to use of balanced fertilizer, fate of rice plants when plant nutrients are diffident, important of application of all plant nutrients and application of organic manure to provide micronutrients. Also, Farmers were educated for the fertility status of their fields.



Training programme on IPNs and Paddy Husk Charcoal preparation at Anuradhapura(IP)

### e. Shramadana campaign

Arranged 25 Shramadana campaign to educate wider cross section of people including school children on use of IPNS particularly use of organic manure. 25 programmes were planned and completed 10 programmes.



Shramadana campaign at Anuradhapura (IP) on use of rice straw and green manure

### 8. Preparation of Training Manual and curriculum

Training manual on IPNS have prepared in Sinhala, Tamil and English languages and distributed among field officers' throughout the country.

However leaflet were prepared, but could not printed to be distributed among farmers and various other clients.

### 9. Conclusions and Recommendations

1. The programme was successful as it has achieved its objectives considerably. Mainly creating awareness of IPNS among officers and farmers, training of officers for IPNS practices, disseminate IPNS technology for farmers.
2. Also, application of IPNS practices substantially improved the yields and also some farmers were able to save fertilizer applied.
3. Field implementation showed that Biological Soil Test kit can be easily used at farmers' level to identify the nutrient and fertility status of farmer fields. In addition to that, this can be used to educate farmers to show the importance of balance nutrient application. Therefore, a programme has to be initiated to implement and popularize this technology among farmers.
4. Present fertilizer subsidy scheme substantially influenced the success of the programme as the farmers are getting fertilizer at a cheaper rate and less willing to use cumbersome organic manure application. Therefore encourage adaptation of IPNS practices; particularly application of organic manure was difficult.

5. Implementation difficulty was occurred mainly due to too many organizations involved. Therefore, in future number of organizations has to be reduced.
6. Lack of officers at field level influenced the implementation in certain district and also the remaining officers have a large number of programmes to be implemented by them.

Dr W M A D B Wickramasinghe  
Coordinator

Annex 1:- Details of Farmer Training Classes (Anuradhapura IP)

AI Range	Name of the AI	Date of the Training	Name of the Yaya	No. of Participants	Average Evaluation marks before training	Average Evaluation marks after training
Kivulekada	Mr. Dimuthu Ranasinghe	2008.05.14	Aluth Divulwewa	10	8/15	12/15
		2008.05.22	Ellungasyaya	09	07/15	11/15
Mailagaswewa	Mrs. Nirmala Bandaranayake	2008.07.19	Usgollewa	24	07/15	10/15
		2008.07.23	Siyamblewa	19	07/15	09/15
Manankattiya	Mr. S. Ranasinghe	2008.05.15	SC Fc 07	10	09/15	12/15
		2008.05.15	SC Fc 4-6	13	08/15	11/15
Nikawewa	Ms. Nadeeka Somasinghe	2008.05.30	Pandikaramaduwa	17	09/15	11/15
		2008.06.13	Mecgahapattiya	18	07/15	11/15
Galenbidunuwewa	Mr. S.B. Thelwadana	2008.06.30	Gomarankalla	17	07/15	10/15
		2008.06.19	Kunugonewa	14	09/15	12/15
Divulwewa	Ms. Wathsala Weerasekara	2008.06.27	HLD 27 Fc 06	11	09/15	12/15
		2008.06.27	HLD 27 Fc 07	11	08/15	10/15
Shrawasthipura	Mrs. Charuni Liyanage	2008.08.02	HLD 39	08	11/15	13/15
		2008.08.01	HLD 35	10	09/15	12/15
Madawalagama	Mrs. D.A.G. Dissanayaka	2008.07.01	LLD 07	07	09/15	12/15
		2008.07.01	LLD 08b	09	08/15	10/15
Hindogama	Mrs. Nandani Mangalika	2008.07.13	HLD 2-A	13	10/15	13/15
		2008.06.26	HLD 6-B	21	08/15	12/15
Dewaluwa	Mrs. Nadeeka Bannehka	2008.07.14	yaya 06	10	08/15	14/15
		2008.05.16	Yaya 05	11	10/15	14/15
Budugelima	Mr. T.M. Senevirathna	2008.07.18	Yaya 08	09	06/15	12/15
		2008.06.06	Fc 24	06	05/15	12/15
Perimiyankulama	Mrs. Vijitha Dissanayake	2008.07.03	Halmillakulama	16	08/15	12/15
		2008.07.04	Sampathyaya	13	07/15	11/15
Nuwarawewa	Mr. Ajith Kumara	2008.06.07	D4 Fc23	12	07/15	13/15
Rajanganaya	Mr. H.D. S. Hathursinghe	2008.05.16	Yaya 02 Fc04	24	06/15	12/15
		2008.05.16	Yaya 15 Fc 6b	30	08/15	13/15
Wahalkada	Mr. Prasad Senevirathna	2008.04.29	D1 Fc 13	35	08/15	12/15
		2008.06.23	D1 Fc 05	13	10/15	14/15
Usgala Siyambalangamuwa	Mr. Sampath Bandara	2008.04.22	Yaya 02 Fc 1-2	28	06/15	09/15
		2008.05.06	Yaya 02 Fc 37	18	08/15	10/15
Rajanganaya Left Bank	Mr. R.K. Adhikaram	2008.08.14	D2 Fc 31	12	08/15	12/15
		2008.08.14	D2 Fc 29	16	09/15	13/15
Padavi-Parakramapura	Mr. Naleen Dissanayaka	2008.08.12	Elikimbulagala	18	04/15	08/15
Mahakanadarawa Right Bank	Mrs. Saranga Subashini	2008.06.17	Fc 23 G-5	12	06/12	11/15
		2008.05.29	Maharikawewa	11	07/12	13/15
Mahakanadarawa Left Bank	Mr. Buvaneka Bandara	2008.05.27	Rambewagama	13	07/15	11/15

IPNS プロジェクト終了時評価 現地調査・評価表原案作成等実施者

- ・ 湯浅啓一郎

Representative

JICA Sri Lanka Office

- ・ 山田潤一郎

JICA Expert (スリランカ国派遣)

Advisor for Agriculture, Irrigation and Rural Development

- ・ Mr. Hemachandra Udumalagala

Field Investigator for JICA IPNS Project Terminal Evaluation

契約期間 2009年1月26日～3月6日

Tel. 0777-278210

e-mail: uahema@gmail.com