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RURAL PRIMARY HEALTH CARE PROJECT

FINAL EVALUATION REPORT

By

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ABBREVIATIONS

CDC	=	Communicable Disease Control
CNC	=	Child Nutrition Center
DCD	=	Division of General Communicable Diseases
DDHO	=	Deputy District Health Officer
DHO	=	District Health Officer
FP	=	Family Planning
GPO	=	Government Pharmaceutical Organization
HA	=	Health Assistant
HFA	=	"Health For All"
HPD	=	Health Planning Division
MCH	=	Maternal and Child Health
MOPH	=	Ministry of Public Health
NCDDP	=	National Control of Diarrheal Diseases Program
NESDB	=	National Economic and Social Development Board
NP	=	Nurse Practitioner
OPD	=	Outpatient Department
OPHC	=	Office of Primary Health Care
ORS	=	Oral rehydration salts
ORT	=	Oral rehydration therapy
PAFU	=	Project Administration and Financing Unit
PHN	=	Public Health Nurse
PCMO	=	Provincial Chief Medical Officer
PHC	=	Primary Health Care
PHN	=	Public Health Nurse
RPHCE	=	Rural Primary Health Care Expansion
RN	=	Registered Nurse
RTG	=	Royal Thai Government
SD	=	Sanitation Division
USAID	=	United States Agency for International Development
VHC	=	Village Health Communicator
VHV	=	Village Health Volunteer
VHW	=	Village Health Workers (VHVs, VHCs)
VSC	=	Village Sanitation Craftsmen

ACKNOWLEDGMENTS

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BASIC PROJECT IDENTIFICATION DATA

1. Country: Thailand
2. Project Title: Rural Primary Health Care Expansion
3. Project Number: 493-0291
4. Project Dates:
 - a. First Project Agreement: May 4, 1978
 - b. Final Obligation: FY84
 - c. Project Assistance Completion Date (PACD): October 31, 1986
5. Project Funding:
 - a. First Project Agreement: \$6,483 million
 - b. Other major Donors: -
 - c. Host Country Counterpart Funds: \$20,700 million

TOTAL: \$27,183 million
6. Mode of Implementation: Host Country (Ministry of Public Health)
7. Project Design: RTG/Ministry of Public Health
USAID/Thailand
Medical Service Consultants, Inc.
Johns Hopkins University
8. Responsible Mission Officials: (For the full life of the project)
 - a. Mission Director(s): Charles Gladson, Don Cohen, Robert Halligan, and John Eriksson
 - b. Project Officer(s): Henry D. Merrill, David Oot, and Narintr Tima
9. Previous Evaluation(s): Mid-term Evaluation, Feb/March 1980
10. Cost of Present Evaluation:

	<u>Person Days</u>	<u>Dollar Costs</u>
a. Direct Hire:	-	-
(1) AID/W TDY:	-	-
(2) USAID staff:	-	-
b. Contract:	90	24,900
c. Other:	-	2,100

สรุปรายงานการประเมินผล
โครงการขยายงานสาธารณสุขมูลฐานชนบท

กันยายน ๒๕๒๔

กระทรวงสาธารณสุข ได้ดำเนินการในโครงการขยายงานสาธารณสุขมูลฐานชนบท (Rural Primary Health Care Expansion, AID No. 493-0291) ในช่วงเวลา ๕ ปี คือ ตั้งแต่ปีงบประมาณ ๒๕๒๑ ถึง ๒๕๒๕ และใช้เงินดำเนินการ จำนวน ๖.๔ ล้านเหรียญ องค์การยูเอสเอ (USAID) ได้ให้ความช่วยเหลือเป็น ๒ ช่วง คือ ช่วงแรกได้ดำเนินการร่วมกับโครงการประชากร ที่ได้รับความช่วยเหลือจากธนาคารโลก (World Bank - Population Project) โดยได้ ดำเนินการใน ๒๐ จังหวัดที่ความเจริญต่างกัน ๑ ยังไม่ทั่วถึง การช่วยเหลือช่วงนี้ได้เน้นไปในด้าน ของการฝึกอบรมและการวิจัย สำหรับในช่วงที่ ๒ ซึ่งเริ่มในปีงบประมาณ ๒๕๒๖ ได้มุ่งไปในการ สนับสนุนด้านโภชนาการใน ๑,๕๐๐ หมู่บ้าน ของ ๓๗ จังหวัด ในพื้นที่ยากจน ต่อมาในปีงบประมาณ ๒๕๒๗ ได้เพิ่มการสนับสนุนในด้านการควบคุมโรคอุจจาระร่วง การสุขาภิบาล และ การจัดหาหน้าสะอาดไว้ดื่ม ในหมู่บ้านที่ยากจน ๑,๐๐๐ หมู่บ้าน คณะประเมินผลได้รับมอบหมายให้ดำเนินการประเมินประสิทธิผลของ โครงการ ฯ ตามเป้าหมายและวัตถุประสงค์ที่กำหนดไว้ ตลอดจนผลกระทบต่องานต่าง ๆ ที่ กระทรวงสาธารณสุขได้ดำเนินการอยู่ อันได้แก่ ระบบงานสาธารณสุขมูลฐาน โภชนาการในชุมชน การควบคุมโรคอุจจาระร่วง การจัดหาหน้าสะอาดและการสุขาภิบาล

สาระสำคัญของผลการประเมินผลของโครงการ

ก. การฝึกอบรม

๑) สิ่งที่พบ

คณะประเมินผลมีความเห็นสอดคล้องกับรายงานการประเมินผลครึ่งแผนของโครงการ (Mid-term Evaluation) ปรากฏว่าผู้เข้ารับการอบรมทุกระดับและคุณภาพของการอบรม ในช่วงแรกอยู่ในขั้นดี และการอบรมในช่วงที่ ๒ ได้ผลตรงตามเป้าหมายทั้งปริมาณและคุณภาพ

กระทรวงสาธารณสุขได้จัดกระบวนการอบรมให้มีลักษณะการเรียนการสอนแบบแก้ปัญหา ซึ่งสอดคล้องกับความต้องการของผู้เข้ารับการอบรม จากการประเมินเมื่อเสร็จสิ้นการอบรมพบว่า ผู้เข้ารับการอบรมมีความรู้เพิ่มขึ้น แต่ยังขาดการติดตามประเมินผลในระยะสั้นและระยะยาว หลังการอบรม

คณะประ เมีนผลอบรมมีความ เห็นว่า การถ่ายทอดความรู้ด้าน สุขภาพอนามัยให้แก่ประชาชน ยังดำเนินการไม่ดี เท่าที่ควร รากฐานของการสาธารณสุขมูลฐานในระดับหมู่บ้านยังไม่ดีพอ อย่างไรก็ตาม สำหรับโครงการที่มีขอบ เขตกว้างขวางและเป็นโครงการใหม่เช่นนี้ ประชาชนก็มีความสนใจและความ เข้าใจในระบบงานสาธารณสุขมูลฐานดีพอสมควร แต่ก็ยังจำเป็นต้องศึกษาและวิเคราะห์หาสาเหตุ และการแก้ปัญหาในเรื่องนี้ให้ชัดเจนยิ่งขึ้น

กระทรวงสาธารณสุข ได้จัดการฝึกอบรมด้านการรักษาพยาบาล และ การบริหารงาน แก่เจ้าหน้าที่ระดับตำบล และได้มีการจัดฝึกอบรมแก่อาสาสมัครสาธารณสุขหมู่บ้าน แต่ยังไม่มีการจัดระดับชาติ เรื่องการฝึกอบรม เพื่อ เพิ่มพูนความรู้แก่เจ้าหน้าที่และอาสาสมัครที่เคยรับการอบรมมาแล้ว ฉะนั้นจึง ควรจะมีการวิจัยถึงพฤติกรรมหรือความรู้ความสามารถของ เจ้าหน้าที่ระดับตำบลรวมทั้งย อาสาสมัคร เพื่อช่วยให้มีการวางแผนการฝึกอบรมที่เหมาะสมต่อไป

สำหรับการฝึกอบรม เรื่องการบริหารงาน ได้จัดให้แก่สาธารณสุขอำเภอและหัวหน้าฝ่าย ในสำนักงานสาธารณสุขจังหวัด คณะประ เมีนผลมีความ เห็นว่า เจ้าหน้าที่ในสำนักงานสาธารณสุขจังหวัด บางแห่งไม่ได้รับแนวความคิดเกี่ยวกับสาธารณสุขมูลฐานอย่างเพียงพอ โดยเฉพาะอย่างยิ่งการกระจาย อำนาจจากส่วนกลาง การฝึกอบรมแบบนี้ได้กำหนดไว้ในช่วงแรก แต่ไม่ได้ดำเนินการ

๒) ข้อเสนอแนะ

การศึกษาเกี่ยวกับการปฏิบัติงานของผู้ที่ผ่านการฝึกอบรมแล้ว ควรจะกระทำอย่างต่อเนื่อง เพื่อประ เมีนประสิทธิผลของการฝึกอบรม ควรจะมีแผนการอบรมฟื้นฟูความรู้แก่เจ้าหน้าที่อย่างเป็นระบบ แขนดั่งกล่าวจะต้องมุ่งไปที่องค์กรการสาธารณสุขมูลฐานในระดับหมู่บ้าน โดยมีเจ้าหน้าที่ตำบล เป็นผู้สนับสนุน กระทรวงสาธารณสุขและกระทรวงที่เกี่ยวข้องอื่น ๆ น่าจะเน้นการให้การสุขศึกษาแก่ประชาชนด้วยการใช้ สื่อสารมวลชน เพื่อ เสริมการสื่อสารแบบบุคคลต่อบุคคล การปฐมนิเทศเกี่ยวกับปรัชญาและความก้าวหน้า ของการสาธารณสุขมูลฐานแก่เจ้าหน้าที่ในสำนักงานสาธารณสุขจังหวัด ควรจะได้รับการพิจารณาเป็นพิเศษ การปฐมนิเทศดังกล่าวอาจจัดได้ในการประชุม เพื่อปรึกษาหารืองานตามปกติหรือจัดประชุมปฏิบัติการ เป็นพิเศษในแต่ละ เขตก็ได้

ข. การวิจัยและการประเมินผล

๑) สิ่งที่พบ

กระทรวงสาธารณสุข ได้ให้ความสนับสนุนการวิจัยเกี่ยวกับการสาธารณสุขมูลฐานค่อนข้างน้อย โครงการ ฯ ได้กำหนดการวิจัยไว้ในแผนถึง ๔ เรื่อง แต่การวิจัยได้ทำสมบูรณ์เพียง ๓ เรื่องเท่านั้น เหตุผลที่สำคัญ คือ รัฐบาลไม่มีนโยบายที่จะสนับสนุนการใช้เงินกู้เพื่อการวิจัยและประกอบกับนโยบายของยู.เอส.เอ. (USAID) ประสงค์จะสนับสนุนให้กองแผนงาน มีศักยภาพในการวิจัยและประเมินผลจากนโยบายดังกล่าว จึงไม่อาจขอให้มหาวิทยาลัยหรือหน่วยงานที่มีความเชี่ยวชาญในการประเมินผลและวิจัยมาช่วยงานนี้ได้ อย่างไรก็ตาม ได้มีงานวิจัยที่หน่วยงานอื่นได้ทำเสร็จแล้วก็มี เช่น ผลการวิจัยสำรวจการพัฒนากองทุนหมู่บ้านของ สภาพัฒนาเศรษฐกิจและสังคมแห่งชาติ

ระบบข้อมูลข่าวสารในการกำกับการให้ระบบการสาธารณสุขมูลฐานดำเนินงานในระดับท้องถิ่นนั้น คณะผู้ประเมินผลไม่มั่นใจว่า ผู้ปฏิบัติงานมีความเข้าใจเรื่องนี้ดีพอ ทั้งนี้อาจเป็นเพราะเจ้าหน้าที่มักสนใจแต่ตัวเลขผลงานที่ทำได้จริง แต่ต้องพิจารณาด้วยว่าประชากรเป้าหมายที่ควรจะได้รับบริการแต่ละอย่างนั้นมีมากน้อยเพียงใด แบบฟอร์มรายงานต่าง ๆ ที่ใช้อยู่ในปัจจุบันมิได้มีรายการที่จะบอกถึงจำนวนประชากรเป้าหมายทั้งหมดซึ่งจะใช้ในการประเมินการครอบคลุมของงานบริการแต่ละอย่าง

การรวบรวมข้อมูลและการส่งข้อมูลจากระดับท้องถิ่นไปสู่ระดับจังหวัดและส่วนกลาง ไม่ได้เป็นไปตามกำหนด สิ่งที่น่าสังเกตอีกประเด็นหนึ่ง คือ แบบฟอร์มต่าง ๆ ที่ใช้ในการรวบรวมข้อมูลต่าง ๆ นั้น ก็ไม่แน่ใจว่าจะมีประโยชน์ต่อการประเมินผลงานมากน้อยเพียงใด

๒) ข้อเสนอแนะ

ควรจะมีการกำหนดหัวข้อที่จะวิจัยปฏิบัติการเกี่ยวกับการสาธารณสุขมูลฐานและดำเนินการในเรื่องนี้ให้เร็วที่สุด วิธีการหนึ่งที่น่าจะปฏิบัติได้ คือ ทำการติดต่อกับมหาวิทยาลัยหรือหน่วยงานที่สนใจในเรื่องนี้ เพื่อประสานงานกับสำนักงานสาธารณสุขมูลฐานของกระทรวงสาธารณสุข นักระบาดวิทยาจากกระทรวงสาธารณสุขควรให้ความสนใจและปรับปรุงการวิเคราะห์ข้อมูลเกี่ยวกับจำนวนป่วย และจำนวนตาย ข้อมูลที่เกี่ยวกับการบริหาร ควรจะทำให้ง่ายและข้อมูลใดที่มีความสำคัญต่อการที่จะบอกการครอบคลุมของงานบริการต่าง ๆ ควรนำมารวมไว้ที่สำนักงานสาธารณสุขมูลฐาน ฉะนั้นสำนักงานสาธารณสุขมูลฐานควรมีหน่วยงานการประเมินผล เพื่อดำเนินการรวบรวมข้อมูลดังกล่าว หน่วยงานดังกล่าวควรร่วมมือกับหน่วยงานอื่น ๆ ที่มีส่วนเกี่ยวข้องกับสาธารณสุขมูลฐานอย่างใกล้ชิดด้วย

ค. การใช้บริการทางสาธารณสุข

๑) สิ่งที่พบ

จากข้อมูลเกี่ยวกับการสาธารณสุขมูลฐานในปี พ.ศ. ๒๕๒๗ - ๒๕๒๘ ชี้บ่งว่า อาสาสมัครสาธารณสุขได้ให้บริการแก่ชุมชนในขอบ เขตที่กว้างขวางในช่วงดังกล่าว มีประชาชนที่ เข้าถึงบริการสาธารณสุข (หรือสามารถไปใช้บริการได้) ใน ๒๐ จังหวัดของโครงการ ประมาณร้อยละ ๖๓ ของจำนวนประชากร ๑๗.๘ ล้านคน จากข้อมูลในรายงาน พ.ศ. ๒๕๒๗ พบว่ามีประชาชนมารับบริการ เป็นจำนวน ๔,๘๗๓,๐๐๐ ครั้ง หรือ ประมาณ ร้อยละ ๔๓ ของประชาชนทั้งหมด ในจำนวนนี้แบ่งเป็น ประชาชนมารับบริการทางด้านป้องกันโรคถึงร้อยละ ๖๐ - ๗๐ ของจำนวนที่มารับบริการ ข้อมูลดังกล่าว รวมถึงผู้ที่มาใช้บริการ เกินหนึ่งครั้งด้วย ฉะนั้นข้อมูลที่ได้อาจเกินความจริงไปบ้าง

ประชาชนได้มาใช้บริการที่สถานีอนามัยตำบลเพิ่มขึ้นเล็กน้อย แต่ประชาชนได้มาใช้ บริการที่โรงพยาบาลชุมชนและโรงพยาบาลทั่วไปใน ๒๐ จังหวัด ในเขตโครงการมากขึ้นมาก และพบว่า ระบบการส่งผู้ป่วยต่อ ระหว่างสถานีอนามัยและโรงพยาบาลต่าง ๆ มีประสิทธิภาพมาก โดยเฉพาะ เมื่อผู้ป่วยได้ไปใช้สถานีอนามัย เมื่อ เริ่ม เจ็บป่วย เป็นด่านแรก

๒) ข้อเสนอแนะ

เพื่อให้การใช้บริการทางด้านสาธารณสุขมีประโยชน์อย่างแท้จริง น่าจะมีการศึกษาว่า เพราะเหตุใดประชาชนจึงไม่นิยมใช้สถานีอนามัยเป็นสถานบริการแห่งแรก เมื่อ เจ็บป่วย ในการวิจัย เพื่อ ศึกษาเรื่องดังกล่าว ควรจะได้ศึกษาถึงคุณภาพของการปฏิบัติงานของอาสาสมัครสาธารณสุข ตลอดจน เจตคติของประชาชนต่อเจ้าหน้าที่สาธารณสุขด้วย เป็นที่แน่นอนว่า ระบบการสาธารณสุขมูลฐานจะ ครอบคลุมกว้างขวางยิ่งขึ้น ฉะนั้นการหาข้อมูลที่จะบอกถึงแนวโน้มของการปฏิบัติงานของ เจ้าหน้าที่ตำบล จึงเป็นสิ่งจำเป็นต่อการบริหารงาน ข้อมูลที่ได้ควรจะเกี่ยวข้องกับลักษณะและจำนวนของผู้ป่วยนอก และผู้ป่วยใน จากพื้นที่เดียวกัน เพื่ออุลักษณะรูปแบบการใช้บริการ ควรมีการพิจารณาให้มีการสำรวจ ข้อมูลรายครอบครัวในชุมชน เพื่อสอบถามถึงความรู้และการร่วมกิจกรรมทางด้านสาธารณสุขมูลฐาน โดยเฉพาะทางสุขาภิบาลและโภชนาการ

ง. โภชนาการ

๑) สิ่งที่พบ

คณะประเมินผลไม่สามารถหาข้อมูลที่จะนำมาประเมินผลกระทบที่ชัดเจน จากความช่วยเหลือขององค์การยูเนสโกในระยะต้นของกิจกรรมด้านการส่งเสริมโภชนาการชนบทในหมู่บ้าน เป้าหมาย ๑,๗๘๑ หมู่บ้าน ใน ๓๗ จังหวัด แม้ว่าระยะที่ ๒ ของโครงการซึ่งได้เริ่มใน พ.ศ. ๒๕๒๖ และกองทุนโภชนาการได้จัดตั้งขึ้นในทุกหมู่บ้านเป้าหมายแล้วก็ตาม คณะประเมินผลมีความเห็นสอดคล้องกับรายงานของสภาพัฒนาเศรษฐกิจและสังคมแห่งชาติว่า การดำเนินงานของกองทุนโภชนาการประสบความสำเร็จน้อยกว่ากองทุนเวชภัณฑ์ประจำหมู่บ้าน อาหารเสริมส่วนใหญ่ได้แจกจ่ายให้แก่เด็กอายุต่ำกว่า ๕ ปี ที่ขาดสารอาหารระดับรุนแรงโดยไม่คิดมูลค่าเป็นครั้งคราว แต่แม่ของเด็กที่อยู่ในภาวะที่ปกตินักจะไม่ซื้ออาหารเสริม เนื่องจากไม่เป็นที่นิยมของประชาชนทั่วไปในเรื่องรส กลิ่น และไม่สามารถเก็บไว้ได้นาน จึงเป็นเหตุให้ทุนหมุนเวียนลดน้อยลง

การติดตามการเจริญเติบโตของเด็กตามโครงการแผ่ระวางทางโภชนาการในระบบงานสาธารณสุขมูลฐาน ได้ขยายไปอย่างกว้างขวางมากระหว่างปี ๒๕๒๒ - ๒๕๒๕ จนกระทั่งถึงเดือนมิถุนายน ๒๕๒๕ ซึ่งได้พบว่ามีเด็กอายุต่ำกว่า ๕ ปี กว่า ๒ ล้านคน (ประมาณ ๔๑% ของเป้าหมาย) ได้รับการชั่งน้ำหนัก จากการวิเคราะห์ผลการชั่งน้ำหนักนี้พบว่า ช่วงเวลาของการชั่งไม่ตรงกัน เช่น มกราคม ๒๕๒๒ - มีนาคม ๒๕๒๔ (๓๕ เดือน) เทียบกับ ตุลาคม ๒๕๒๖ - มกราคม ๒๕๒๗ (๔ เดือน) และตุลาคม ๒๕๒๗ - ธันวาคม ๒๕๒๗ (๓ เดือน) อาจจะเป็นไปได้ว่า การเฝ้าสังเกตในช่วงเวลาที่ยาวนานกว่า อาจทำให้พบเด็กที่ขาดสารอาหารได้มากกว่า ที่สังเกตในระยะสั้น ๆ ถ้าความเห็นนี้เป็นจริง ก็อาจจะคาดหมายได้ว่า จำนวนเด็กขาดสารอาหารที่พบนั้นไม่สอดคล้องกับสภาวะโภชนาการที่เป็นอยู่จริงโดยทั่วไป นอกจากนี้ดังได้กล่าวแล้วว่า ความครอบคลุมของการชั่งน้ำหนักเด็กยังไม่สมบูรณ์จึงอาจจะทำให้ผล การชั่งน้ำหนักที่ได้(สภาวะทุพโภชนาการตามที่รายงาน) นั้นไม่เที่ยงตรงนัก มีรายงานการศึกษาในประเทศไทยบางแห่งระบุว่าเด็กที่มีปัญหาทุพโภชนาการ มักจะไม่ได้รับการชั่งน้ำหนัก ถ้าเป็นจริง เช่นนั้นภาวะทุพโภชนาการจากรายงานที่เป็นอยู่ในปัจจุบันก็มักจะเป็นภาพที่ดีกว่าที่เป็นจริง นอกจากนี้ยังจำเป็นต้องตรวจสอบความเที่ยงตรงของการชั่งน้ำหนักซึ่ง ผสส./อสม. เป็นผู้ดำเนินการด้วย

คณะประเมินผลมีความเห็นว่า ข้อมูลจากการแผ่ระวางทางโภชนาการนั้นมีประโยชน์ในการติดตามความก้าวหน้าของงาน แต่ยังไม่เป็นข้อมูลที่เที่ยงตรงนักที่จะบอกสภาวะทางโภชนาการของเด็กอายุต่ำกว่า ๕ ปี อย่างไรก็ตาม คณะประเมินผลรู้สึกประทับใจที่แทบจะไม่พบเด็กที่ขาดสารอาหาร

ในระดับรุนแรงเลย ไม่ว่าจะเป็นในโรงพยาบาลหรือหมู่บ้านที่ไปเยือน แม้ว่าข้อมูลระหว่างปี ๒๕๒๔ - ๒๕๒๗ จะบ่งว่าภาวะโภชนาการของเด็กไทยจะดีขึ้นก็ตาม คณะประเมินผลยังหวังว่า "การสำรวจทางประชากรและสาธารณสุข" คงจะช่วยขจัดความสงสัยนี้ได้

บัตรบันทึกการเจริญเติบโตของเด็ก ซึ่งแม่เป็นผู้เก็บไว้ นั้น มีข้อมูลเกี่ยวกับอนามัยแม่และเด็กที่มีประโยชน์มากในการให้ลูกศึกษาแก่แม่ แต่คณะประเมินผลไม่มีข้อมูลพอที่จะบอกว่าแม่และเจ้าหน้าที่สาธารณสุขได้เก็บบัตรนั้นไว้ และได้ใช้ข้อมูลจากบัตรนั้น เพียงใด

คณะประเมินผลพบว่า ยังมีการให้ความสนใจต่อภาวะโภชนาการของหญิงมีครรภ์น้อยมาก ทั้งนี้อาจจะเป็น เพราะยังขาดความเข้าใจว่าภาวะโภชนาการของแม่นั้นมีผลต่อน้ำหนักแรกเกิดของทารก ถ้าทารกมีน้ำหนักแรกเกิดปกติแล้วก็จะมีผลทำให้การเจริญเติบโตในช่วงอายุก่อน ๕ ขวบ เป็นไปด้วยดี

๒) ข้อเสนอแนะ

จนกว่าการแผ้วถางทางโภชนาการจะมีความถูกต้องและสมบูรณ์อย่างแท้จริง ในระยะนี้ จำเป็นต้องอาศัยการสำรวจเป็นระยะ ๆ ถึงภาวะและการเปลี่ยนแปลงทางโภชนาการในกลุ่มเด็กก่อนวัยเรียนไปก่อน จำเป็นต้องหาวิธีการสุศึกษาและประชาสัมพันธ์ที่เหมาะสม เพื่อให้แม่ในชนบทตระหนักถึงความสำคัญของการติดตามการเจริญเติบโตของเด็ก โดยการชั่งน้ำหนักโดยสม่ำเสมอ ควรจะหาทางใช้สื่อมวลชนแขนงต่าง ๆ เข้าช่วยเจ้าหน้าที่สาธารณสุขและอาสาสมัครสาธารณสุขในการถ่ายทอดความรู้และข้อมูลต่าง ๆ อย่างเหมาะสม จำเป็นต้องศึกษาวิจัยระบบกองทุนโภชนาการเพื่อประเมินหาประสิทธิผลของการดำเนินงานในปัจจุบัน นอกจากนี้ควรเร่งรัดการส่งเสริมโภชนาการในมารดาด้วย เพราะน้ำหนักแรกเกิดของทารกเป็นปัจจัยที่สำคัญมากต่อการอยู่รอดและเจริญเติบโตของเด็ก

จ. งานสุขาภิบาล

๑) สิ่งที่พบ

จากการเพิ่มกิจกรรมทางสุขาภิบาล เข้าไปในโครงการ ฯ ใน พ.ศ. ๒๕๒๔ คณะประเมินผลพบว่า กองทุนพัฒนาสุขาภิบาลได้มีการจัดตั้งขึ้นอย่างรวดเร็วใน ๑,๐๐๐ หมู่บ้าน เป้าหมายและงานต่าง ๆ ในด้านนี้ดำเนินไปได้ด้วยดี อย่างไรก็ตาม แม้ว่าจำนวนส้วม ภาชนะเก็บน้ำ เครื่องกรองน้ำและอื่น ๆ กำลังเพิ่มขึ้นตามลำดับในหมู่บ้านเหล่านี้ คณะประเมินผลยังเห็นว่า เป็นการเร็วเกินไปที่จะประเมินประสิทธิผลและผลกระทบของกิจกรรมด้านนี้ จากการสังเกตการดำเนินงานพบว่าเงินทุนหมุนเวียนที่ใช้สำหรับกองทุน ฯ ยังไม่เพียงพอและมีแนวโน้มที่ว่าเงินทุนหมุนเวียนจะ

ลดน้อยลงและหมุนเวียนซ้ำในบรรดาหมู่บ้านที่อยู่ในเขตพื้นที่ยากจนเหล่านี้ จากผลการดำเนินงานพบว่า ร้อยละของประชาชนที่มีน้ำดื่มที่สะอาดบริโภคได้เพิ่มขึ้น จาก ๑๗ เป็น ๓๐ และร้อยละของประชาชน ที่มีและใช้ส้วมได้เพิ่มขึ้น จาก ๒๖ เป็น ๓๓ ในหมู่บ้านเป้าหมาย

๒) ข้อเสนอแนะ

ควรจะได้มีการติดตามความก้าวหน้าในการจัดทำ/จัดหา ส้วม ภาชนะเก็บน้ำ เครื่องกรองน้ำและอุปกรณ์การพัฒนาสุขภาพต่าง ๆ ในหมู่บ้านเป้าหมาย การศึกษาในด้านการใช้ และการบำรุงรักษาอุปกรณ์ เครื่องอำนวยความสะดวกที่จัดสร้างขึ้นในหมู่บ้าน เพื่อให้แน่ใจว่าประชาชน มีความรู้และมีพฤติกรรมไปในทางก่อประโยชน์ในด้านสุขภาพอนามัย กองทุนพัฒนาสุขภาพหมู่บ้าน ควรจะมีการประเมินผลและทบทวนหาประสิทธิภาพและความเป็นไปได้สำหรับการดำเนินงานในระยะยาว โดยต่อเนื่อง

จ. การควบคุมโรคอุจจาระร่วงและอหิวาตกโรค

๑) สิ่งที่พบ

การอบรมตามโครงการควบคุมโรคอุจจาระร่วงในส่วนที่ได้รับความช่วยเหลือจาก องค์การยูเนสโก ในจังหวัดที่เป็นเป้าหมายของกระทรวงสาธารณสุขสามารถดำเนินได้เป็นผลสำเร็จ ผงน้ำตาลเกลือแร่ (ไอ. อาร์. เอส.) มีเพียงพอที่จะจ่ายให้แก่สถานบริการสาธารณสุข อาสาสมัครสาธารณสุขและกองทุนเวชภัณฑ์ประจำหมู่บ้านได้อย่างทั่วถึง แต่ยังมีปัญหาในด้าน รส กลิ่น ขนาด บรรจุและอายุการใช้งาน ทำให้ความนิยมในหมู่ประชาชนไม่มาก เท่าที่ควรจะเป็น เมื่อเปรียบเทียบกับผงน้ำตาลเกลือแร่ สูตรต่าง ๆ ที่ผลิตและจำหน่ายโดยภาคเอกชน ซึ่งอาจจะมีปริมาณการใช้ใกล้เคียงกัน ในปี พ.ศ. ๒๕๒๔ ประมาณว่ามีเด็กอายุต่ำกว่า ๕ ปีทั่วประเทศประมาณร้อยละ ๖๐ ขึ้นไป สามารถมาขอรับผงน้ำตาลเกลือแร่ (ไอ. อาร์. เอส.) จากสถานบริการสาธารณสุข และ ประมาณ ร้อยละ ๓๔ ของเด็กที่ป่วยด้วยโรคอุจจาระร่วง ได้รับการรักษาด้วยผงน้ำตาลเกลือแร่นี้ การคาดคะเน อัตราการใช้ผงน้ำตาลเกลือแร่จากภาครัฐนี้นับว่าต่ำกว่าที่เป็นจริงมาก เพราะไม่ได้รวมแหล่งที่มา และการใช้จากภาคเอกชนเข้าไปด้วย คณะประเมินผลยังพบว่าการยอมรับ ความเข้าใจ และการรู้จักใช้ผงละลายน้ำตาลเกลือแร่ (ไอ. อาร์. เอส.) ค่อนข้างสูงในกลุ่มประชาชน แต่การใช้อาหารเหลว พื้นบ้านที่มีอยู่และที่จัดเตรียม เป็นสารละลายจากวัสดุที่มีอยู่ในบ้านยังอยู่ในระดับที่ต่ำมาก

ปัจจุบัน มีรายงานจากหน่วยงานที่เกี่ยวข้อง ได้ชี้บ่งว่าอัตราป่วยด้วยโรคอุจจาระร่วง
ในกลุ่มประชากรทั้งหมดทั่วประเทศมีแนวโน้มลดลง คณะประเมินผลมีความเห็นว่ามีเหตุผลน้อยเกินไป
ที่จะด่วนสรุปเช่นนั้น แต่ก็เชื่อว่าการลดของอัตราผู้ป่วยที่ตายด้วยโรคอุจจาระร่วง ในช่วง พ.ศ. ๒๕๒๑ -
๒๕๒๗ มีข้อมูลและหลักฐานชัดเจนพอที่จะเชื่อถือได้แน่นอน

สำหรับกิจกรรมด้านการควบคุมอิวาตกโรค คณะประเมินผลมีความเห็นว่ามีกิจกรรมต่าง ๆ
ลดน้อยลงไปมาก เมื่อเปรียบเทียบกับกิจกรรมที่ระบุไว้ในแผนเดิม แต่ก็ได้ดำเนินการไปได้จนแล้วเสร็จ
ตามเป้าหมายที่ปรับใหม่ จากความไม่กระจ่างชัดในด้านชีววิทยาของอิวาตกโรคและการเปลี่ยนแปลง
จำนวนผู้ป่วยของแต่ละปี ทำให้ยากต่อการประเมินผลกระทบของมาตรการควบคุมโรคในระยะเวลายาวขึ้น
เพราะการเปลี่ยนแปลงในจำนวนผู้ป่วยของอิวาตกโรคแต่ละปี กล่าวคือ การเพิ่มหรือลดลงของจำนวน
ผู้ป่วย อาจจะเป็นไปตามธรรมชาติ ตามปกติก็ได้ นอกจากนี้การที่พบว่าจำนวนผู้ป่วยในปีแรก ๆ
ตามโครงการเพิ่มสูงขึ้นอาจจะเนื่องจากการรายงานโรคที่ถูกต้องและสมบูรณ์ก็ได้

๒) ข้อเสนอแนะ

ควรมีการศึกษาเพื่อหาวิธีการเพิ่มการยอมรับผงน้ำตาลเกลือแร่ ซึ่งผลิตโดยองค์การ
เภสัชกรรมในกลุ่มประชาชนทั่วไป ในการศึกษาที่ควรทบทวนหาเหตุผลว่าทำไมประชาชนบางกลุ่ม
จึงชอบผงน้ำตาลเกลือแร่ที่ผลิตโดยภาคเอกชนมากกว่า สำหรับเขตชนบทห่างไกลที่บริการสาธารณสุข
ยังครอบคลุมไม่ถึงควรรหาวิธีการแนะนำให้ใช้อาหารเหลวที่มีอยู่ในบ้านและการเตรียมสารละลาย
โดยใช้วัสดุที่หาได้ในท้องถิ่น เพื่อที่จะสนับสนุนให้การรักษาเด็กป่วยด้วยโรคอุจจาระร่วงระยะเริ่มแรก
ที่บ้านให้มากขึ้น ระบบรายงานการเฝ้าระวังโรคของกองระบาดวิทยา สำนักงานปลัดกระทรวง-
สาธารณสุข น่าจะมีการทบทวนอย่างสม่ำเสมอและจัดทำสรุปการเปลี่ยนแปลงและแนวโน้มของอัตราป่วย
อัตราตาย ด้วยโรคอุจจาระร่วง รวมทั้งโรคระบบทางเดินอาหารอื่น โดยเฉพาะอิวาตกโรค
การวิเคราะห์ในลักษณะนี้ควรที่จะดำเนินการทันทีโดยเสียค่าใช้จ่ายน้อยมาก ทั้งควรจะมีการจำแนก
การเกิดโรคตามกลุ่มอายุและท้องที่ด้วย.

I. EXECUTIVE SUMMARY

A three member team was recruited to carry out a final evaluation of the nine-year (FY 1978 - 1986) \$6,483,000 Thailand Rural Primary Health Care Expansion (RPHCE) Project (AID No. 493-0291) being carried out by the RTG Ministry of Public Health (MOPH). USAID assistance was provided in two phases. The first phase, implemented in 20 disadvantaged provinces in conjunction with the World Bank-funded Population Project, provided for training and a series of research and evaluation studies. The second phase supported community nutrition activities in 1,800 village of 37 provinces beginning in 1983 and, in 1984, added a program of diarrheal disease control, including sanitation and safe drinking water supply in 1,000 needy villages. The team was asked to "determine the achievements of the RPHCE Project against its stated objectives as well as its contributions to the overall MOPH program on PHC network, community nutrition, diarrheal disease control, and rural water supply and sanitation".

Summary of Major Findings and Recommendations

A. Training

1. Findings

We concur with the Midterm Evaluation Report that the "level and quality of training seem quite good, considering the enormity of the effort". This judgment holds for Phase 2 training activities. A comprehensive listing of training activities for both phases appears in Tables IV-1, IV-2 and IV-3.

The MOPH has responded to the felt need of trainees by making courses more problem-based. While evaluation studies suggest short-term gain in knowledge, little is known about the short, or, more importantly, long term attitudes and behavior of trainees.

We sense that knowledge about health is not being transferred to villagers as efficiently as it might be. If our impressions are correct, the base of the PHC system in a substantial number of villages remains weak. In a program of this ambitious scope and relative youth, however, the level of popular understanding of PHC may well be on course. A more objective diagnosis is required.

While the MOPH plans further training in curative medicine and management for certain tambon health center workers, and conducts courses for replacement volunteer village health workers, there is as yet no comprehensive national plan for refresher training. If observational research on the performance of health workers at the Tambon level is undertaken, it might be a useful guide for planning appropriate refresher courses.

While management training has been made available recently to District Health Officers and some section chiefs in the Provincial Chief Medical Officer's (PCMO) office, we feel that not all PCMO offices are oriented adequately to PHC concepts, especially the importance of decentralization. The original Phase 1 plan called for management training, but it was not implemented.

2. Recommendations

Longer-term studies of performance of key trainees are required to assess effectiveness. A plan for refresher training needs to be developed. Such a plan should address first the village PHC structure and its nurturing by tambon level health workers. Renewed attention should be paid to reinforcing village health education through the PHC volunteer structure. The MOPH, in collaboration with other Ministries, should also consider the use of mass media to supplement person-to-person health (and development) education. Further orientation of the PCMO offices to the philosophy and current status of PHC are desirable. This might be done in the context of routine administrative meetings, or perhaps through special regional conferences.

B. Evaluation and Research

1. Findings

Unfortunately, research studies on the PHC effort of the RTG are few. Of 9 studies planned originally, only 3 were completed. The major reasons for this situation are RTG policy on the use of loan money and USAID policy aimed at strengthening the capacity of the Health Planning Division in research and evaluation. Because of these policies, it proved impossible to sub-contract studies to local universities and institutes with proven research capacity. While other studies have been completed, e.g., the NESDB survey of village development funds, some early learning opportunities have been missed.

While the management information system organized to monitor the PHC program was seen operating at the local level, we are not confident that the data is well-understood there, possibly because of its preoccupation with numerators. Critical events like cases seen or activities undertaken (numerators) do need to be counted. Additionally, the number and characteristics of the population (denominator) from which cases come or in which activities occur must also be held in mind. The forms in use are not organized consistently to emphasize the "denominator thinking" critical to the achievement of targets or evaluating the extent of coverage. In addition, collected information does not appear to flow to provincial and central levels in a timely way. It is also not clear that the form in which information is collected is as useful for programmatic evaluation as it might be.

2. Recommendations

A series of specific operations research studies on PHC activities should be started as soon as possible. Most of these will be contracted to interested universities and institutes in collaboration with the Office of PHC. Renewed attention to the analysis of routine morbidity and mortality data (special tabulations will be required) by MOPH epidemiologists might also prove fruitful. Finally, the management information needs to be simplified and streamlined so that critical information on the extent of coverage is available quickly and routinely to PHC program managers. A small evaluation cell at the Office of PHC is needed to process this information and issue reports. Such a cell should also coordinate the efforts of the various MOPH Divisions involved in PHC.

C. Health Care Utilization

1. Findings

Data from the PHC system in 1984-5 suggest that the village health workers (VHWs) are delivering a wide range of services. Access to PHC in the original (1978) 20 provinces is estimated at 63 percent of the total population of 17.8 million. Altogether, in '84 - '85, 4,873,000 visits were recorded by the VHWs, or 43 percent of the population with access. Between 60 to 70 percent of visits were preventive in character. Since individuals may make more than one visit, these data exaggerate coverage. Nevertheless, access and activities are substantial.

Visits to tambon health centers increased between 1982 and 1985, but only marginally, and centers clearly remain underutilized. Outpatient visits to the district and provincial hospitals in the 20 provinces grew much faster over the same period*. The formal referral system between health center and district hospitals appears to be working efficiently, at least when the patient enters the system from the health center level.

2. Recommendations

Careful studies are needed to understand why villagers are by-passing the PHC system. Such research should consider the quality of VHW work in the village and attitudes of the people toward tambon health personnel. While the PHC system is surely growing, timely trend data with detailed breakdown of activity by tambon is needed for management. This information should be assembled with information on outpatient and inpatient visits from the same geographic areas for better understanding of utilization patterns. Consideration needs to be given to the possibility of doing a repeat household survey, including questions on general health knowledge and participation in PHC activities, especially sanitation and nutrition.

* See Appendix C, pages 3-4 for a more detailed assessment of utilization of outpatient health facilities.

D. Nutrition

1. Findings

We have no data to assess the specific results of USAID assistance in community nutrition activities in 1,781 needy villages in 37 provinces. Although this Phase 2 project began only in late 1983, nutrition revolving funds have been organized in all villages. Our strong impression, and one supported by a recently published National Economic and Social Development Board (NESDB) study, is that these funds have not proved as successful as the more numerous village drug cooperatives*. While supplementary food is being given without charge to severely malnourished children under 5 in many villages, mothers of healthy children tend not to buy the supplement. The result is slow decapitalization of the funds. In some places there seemed to be a problem with the palatability of the supplement. In others, shelf life was mentioned, possibly suggesting slow movement of the product.

Growth monitoring activity accelerated greatly between 1979-82 and June 1986 when just over 2 million children under 5 (about 40 percent of the estimated target) were weighed. In some tabulations of this data, the periods of observation are not the same, e.g., January 1979 - March 1982 (39 months), compared to October 1983 - January 1984 (4 months) and October 1984 - December 1984 (3 months). (See Appendix E, Reference 11). It seems likely that observation over the longer period would provide more opportunity to detect malnourished children than over the shortened periods: To the extent this is true, one might expect a progressive fall in the number of malnourished children independent of overall nutritional status. Additionally, as stated above, coverage is incomplete, suggesting the possibility of selection bias. Other studies in Thailand show that children with nutritional problems tend not to be brought forward for weighing. If this is true to any extent with the PHC growth monitoring data, the bias will lead to a more favorable picture than is actually the case. Finally, the accuracy of weighing by VHWs needs verification.

We conclude that however useful growth monitoring is in programmatic terms, the data generated from this activity is not yet a reliable guide to the nutritional status of the under 5 group. We are impressed, however, that severe malnutrition is rarely seen in the hospitals and villages we visited. While cross-sectional data suggests nutritional improvement among young Thai children between 1981 and 1984, we look toward to the forthcoming results of the Demographic and Health Survey to resolve our uncertainty on this important issue.

* Drug cooperatives, usually located in a private house or small neighborhood store, sell simple medications supplied by the GPO at a small profit. Villagers invest in the cooperative by buying shares. Many drug cooperatives have done well and have expanded into other village development activities.

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The growth chart given to mothers for recording of important maternal and child health information seems an excellent health education tool. We have no information, however, on the quality of its maintenance by mothers and health workers.

Little attention seems to have been given to the nutritional status of pregnant women, perhaps because of incomplete understanding in the village of the importance of maternal nutrition to birth weight. The protection of under five begins with live born baby, mature by weight.

2. Recommendations

Until it can be shown that growth monitoring in the PHC system is complete, reliance should be placed on well-designed, periodic cross-sectional surveys to document nutritional change among pre-schoolers. Ways must be found to increase understanding among village mothers that growth monitoring is important. We think that there is a role for the mass-media in helping the VHW and tambon health worker transfer this knowledge effectively. The nutrition revolving funds need special study to assess more completely their effectiveness as currently organized. Because birth weight is a critical factor in child survival, more attention should be given to maternal nutrition.

E. Sanitation

1. Findings

Sanitation activities were added to the Project only in 1985. Revolving funds were organized quickly in the 1,000 targetted villages and activities are off to a good start. While it is far too early to judge the effectiveness of these interventions, we estimate crudely that household availability of safe drinking water and latrine access have increased from 17 to 30 percent, and 26 to 33 percent, respectively, in the target villages. Anecdotal evidence suggests, however, that the revolving loan funds may be undercapitalized and will tend to "revolve" slowly in the poorest of these villages.

2. Recommendations

Progress in building cisterns, water jars, filters, and latrines needs continued monitoring. Studies of the actual use of these facilities, especially the water jars, are needed to be sure that appropriate behavior follows the knowledge that safe water is healthy. The sanitation revolving funds also need examination to establish their efficacy and long-term future.

F. Diarrheal Disease Control and Cholera

1. Findings

USAID's Phase 2 training support of the MOPH's much larger diarrheal disease control project has been completed in the targetted provinces with high poverty levels. Government ORS packets are available throughout the health system and in the PHC structure, including the many successful village drug cooperatives. Because of taste preference, and perhaps also volume considerations, private sector ORS packets are often purchased by villagers, and use may equal consumption of the public sector product. Access to public supply ORS by children under five in poverty areas in 1985 is estimated to be at least 60 percent and use per diarrheal episode, 34 percent. These estimates of use of public supply ORS clearly underestimate total use. Understanding of how to use ORS seems high among village mothers. In our field visits, we found little evidence of home preparation of ORS solution.

While some documents claim a reduction in diarrheal morbidity over the whole population, we see little reason to accept such a conclusion at present. We do find evidence, however, to support the hypothesis that case-fatality ratios have declined over the 1978-1984 period.

Cholera control activities have been greatly reduced from the original plan and were implemented only recently. Given the complex biology of cholera, and the "normal" wide swings in numbers of cases from year to year, it is unrealistic to expect any substantial effect of these activities in the short run. A paradoxical result may be an early increase in number of cases because of better reporting.

2. Recommendations

Further study may be required to enhance the acceptability of the GPO's ORS preparation. Such study might include review of the reasons why private sector ORS is more acceptable to certain segments of the Thai population. In remote, and also in less densely populated villages, it may be desirable to carry out reorientation toward home preparation of ORS. Routine surveillance data from the Epidemiology Division, MOPH, should be reviewed regularly for changes in morbidity and mortality from acute diarrhea, and other gastrointestinal illness. This will require special tabulations for specific age groups and geographic areas. The incidence of cholera should be included in this exercise. The suggested special tabulations can be done right now at minimal cost.

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II. INTRODUCTION AND BACKGROUND

A. Country Health and Health System Profile

In the interest of brevity, the reader is referred to pages 5, 15-16 of the Midterm Evaluation of the Rural PHC Expansion Project, where this information (up to 1980) is well-summarized.

Since 1980, the Thai population growth rate has been further reduced to an estimated 1.7 percent per year in 1984 and the prevalence of current contraceptive use among married couples has reached a remarkable 65 percent (1984 Contraceptive Prevalence Survey). Because of higher birth rates earlier, however, the number of women of reproductive age will continue to grow more rapidly than the total population. Without change in marital patterns or further reduction in desired (and achieved) family size, further decline in the growth rate will be difficult to achieve in the short run. While some minority groups lag behind, family planning methods are widely available and have been accepted quickly by the Thai people. The rapid demographic transition in Thailand has been called, we think correctly, a "social revolution".

In updating the situation with regard to health, it is felt that the infant mortality rate reached 45 per 1,000 live births by the mid-1980s. This rough estimate is plausible, given the improving socio-economic conditions in Thailand, but needs confirmation. Surprisingly high levels of malnutrition among pre-schoolers were documented in a 1980 survey, but there is more recent evidence suggesting improvement. This also requires confirmation. Immunization levels are up for many childhood diseases, although measles lags behind because an immunization campaign against it began only in 1984. In 1985, full protection of pregnant women against tetanus (48 percent) still lagged well behind the Fifth Plan target (70 percent).

Environmental sanitation improved steadily. By 1984, 45 percent of households had access to a toilet and safe drinking water was available to 49 percent of the rural population. As of September 1986, the access to toilet and drinking water increased to 51 and 70 percent, respectively.

Expansion of the health system continued during the Fifth Plan (1981-86). Altogether, 353 new tambon health centers were built. In addition, 60 new district hospitals totalling 600 beds were constructed and staffed. By 1986, the total number of health centers and district hospitals in Thailand was 7,542 and 541, respectively. In addition, there are 87 provincial/regional hospitals throughout the country. A health card system was introduced to promote the concept of health insurance and also to induce more efficient use of the existing health care system.

The growth of the PHC system also continued at a rapid pace. By 1985, elements of PHC had been established in all provinces, districts and tambons, and in 47,000, or 85 percent of Thai villages with 70 percent of the total population. Drug cooperatives had been established in a third of PHC villages. The system was supported by 18,500 central, provincial, and tambon trainers, and in the villages, 47,000 village health volunteers (VHVs) and 450,000 village health communicators (VHCs). In 1984, just over 13 million visits, 62 percent of them preventive in character, were recorded by the PHC system.

B. Description of Population Project

The Population Project was a five-year (1978-1982) \$68 million multi-donor effort funded by the World Bank, Australia, Canada, Norway, and the Royal Thai Government. Its goals were to reduce the rate of population growth from 2.5 percent in 1977 to 2.1 percent in 1981 and to reduce maternal and infant mortality by 50 percent by 1981. These objectives were to be achieved by expanding the rural health care infrastructure, increasing the number and quality of paramedical workers in rural areas, introducing to villages new types of volunteer health and family planning workers, stimulating increased community support of and demand for family planning services, and improving the managerial, supervisory, and evaluative and research capabilities of the MOPH. Project activities were conducted in 20 of Thailand's 72 provinces. The number of people using family planning services and the extent of rural health facility coverage in these 20 provinces were then well below the national average.

C. Description of USAID Rural Primary Health Care Expansion Project, Phase 1

Originally funded by a four-year (1978-1982) \$5,500,000 USAID loan to the Royal Thai Government (RTG), this Project was an integrated component of the larger Population Project, and aimed to make primary health care more accessible to the rural population in the 20 provinces. It intended to accomplish this goal by developing health manpower training programs for a variety of workers at district and lower levels, improving the management and supervisory skills needed for an expanded rural primary care system, and strengthening the health program evaluation and research capabilities of MOPH staff working at the central level and in the province.

D. Description of USAID Rural Primary Health Care Expansion Project, Phase 2

Beginning in 1982, the RPHCE Project was reprogrammed to include community nutrition and MCH activities in 1,200 villages. In 1984, this

activity was expanded further to include an additional 600 villages. The project was designed to promote breastfeeding and to reduce malnutrition among pre-schoolers. In order to measure its effects on the nutrition of pre-schoolers, a longitudinal surveillance* system to record weight by age was established. Activities began in 1,781 villages after training of PHC workers and mothers. Equipment, supplies, and start-up funds were provided to carry out growth monitoring, nutrition education, supplementary food production and distribution, and also to establish nutrition revolving funds.

The second phase also included management training for District Health Officers. This training, planned much earlier, had been delayed pending resolution of MOPH policy regarding their role in the PHC program.

In 1984, activities to control diarrheal diseases through ORT promotion, strengthening of cholera surveillance activities, and improvement of safe water supply and environmental sanitation were added to phase 2. The project funding was increased to \$6.8 million, but later deobligated to \$6.4 million. These additions supplemented the active National Control of Diarrheal Diseases Program (NCDDP) begun by the MOPH in 1979. One thousand villages were targeted for sanitation improvements, including training of village sanitation craftsmen (VSC) and seed money to establish village sanitation funds to build rainwater cisterns and water jars, household water filters, and latrines. Training for ORT promotion was carried out in the 1,781 villages with nutrition activities, and in other villages as well. In order to strengthen cholera surveillance and control, 410 health officials were trained in 6 endemic provinces.

* By surveillance we mean the systematic collection over time of relevant data on health status or other health events of interest. In this instance, the information collected was appropriate to measure change, if any, in the nutritional status of young children.

III. EVALUATION STRATEGY AND COMMENT

The purpose of this final evaluation was to determine the "achievements of the RPHCE Project against its stated objectives, as well as its contributions to the overall MOPH's programs on PHC network, community nutrition, diarrheal disease control, and rural water supply and sanitation" (see Final Evaluation, Scope of Work, Appendix A). The statement of work contains a list of specific objectives to be evaluated.

The three-person team reviewed a variety of routine and special reports from the MOPH and its various responsible Divisions, USAID, and others. Special data tabulations were made available by the MOPH at our request. To answer other questions raised in the Scope of Work, we made our own tabulations from raw data supplied by the MOPH. We interviewed many RTG, USAID and other donor-community officials in the field during our visits to project provinces, and also in Bangkok when our field trips were complete (See the list of field visits in Appendix D). We also interviewed many Thai villagers active in the PHC program.

Final briefings were held at USAID (See summary debriefing memo in Appendix C) but proved impossible to arrange at the MOPH due to the travel schedules of key officials.

It proved difficult to form a comprehensive view of the very extensive, and complex Thai PHC effort in the time available to us. It also was clear immediately in the field that responsible officials did not distinguish sharply between USAID-supported PHC elements and those supported by other donors or the RTG from its own budget. This is perfectly understandable, but frustrated efforts to meet several of the objectives in our Scope of Work (See Appendices A and C). Needed information, when easily available, was provided quickly. Where information simply was unavailable or provisional, however, we were constrained to make tentative judgements based on "snapshot" field impressions. An exception was the issue of efficiency. In the absence of suitable routine or operations research data, it seemed futile to speculate on this important issue.

While remaining solely responsible for our conclusions and recommendations, we have attempted to alert our reviewers when they are based on less "hard" information, and thus more vulnerable to error.

IV. PROJECT STATUS AND RECOMMENDATIONS

A. TRAINING

A.1 Phase 1

The first phase of the Project covered the years 1978-1983. An ambitious health manpower training program was undertaken in order to make PHC services more accessible to the rural population of the original 20 provinces. Funding was provided for short-term training of 9 categories of health workers. Training targets and their achievement are summarized in Table IV - 1.

1. Health Assistants

A four-and six-week training course was given to female trainees, age 18-25, with a grade 10 education or higher. The training class spent 2 weeks in the class room and another 2-4 weeks in the field practicing at family planning facilities or rural health centers. The main objectives of this course were to learn how to (1) prepare clinical equipment, (2) visit homes to follow-up acceptors of MCH and family planning services, (3) make contact with VHVs to replenish supplies of drugs and contraceptives, (4) assist in keeping records and performing routine reporting, and (5) maintain the midwifery centers or the family planning clinics to which they were assigned.

Table IV -1 Number of Personnel Trained under the Rural Primary Health Care Expansion Project - Phase 1, 1978 - 1983

Training program (Categories)	Target	Achievement	Percent	Responsible Organization
1) Health Assistants				
4-week	500	501	100.2	FHD
6-week	750	743	99.1	FHD
2) Nurse Practitioners: 6-and 12-month	900	592	58.7	NCAD
3) Teaching/Learning Process	360	352	97.8	HTD
4) Nurse Instructors: 2-month	220	234	106.4	NCAD
5) Basic Medical Care: 4-month	2,250	2,202	97.9	NCAD
6) Deputy District Health Officers(DDHO)/Supervisors	220	242	110.0	HTD
7) Child Nutrition Center (CNC) Attendants	180	269	149.4	HPS
8) PHC - Tambon Trainers	3,484	3,587	103.0	DHO, PHO
- Village Health Communicators (VHC)*	104,655	105,045	100.4	DHO, THP
- Village Health volunteers (VHV)	7,892	7,928	100.4	DHO, THP
9) Management - Chief, Planning	20	20	100.0	HPD
-Chief, Administration*	40	40	100.0	HPD
-Prov./Dist. Administrators*	365	275	75.3	HPD
-Chief, Promotion Section of District Hospitals	103	101	98.0	HPD
	121,939	122,068	100.1	

Note: FHD = Family Health Division
 NCD = Nursing College Affairs Division
 HTD = Health Training Division
 HPS = Health promotion Section, PHO
 DHO = District Health Officer
 PHO = Provincial Health Office
 THP = Tambon Health Personnel
 HPD = Health Planning Division

* Including chiefs of PCMO's Administration Section and District Health Officers trained in 1983

(a) Findings

A process evaluation of the training course was performed. Based on the results of this evaluation, the training curriculum was revised, placing more emphasis on practice, rather than theory.

Post-training evaluation found that the HAs performed their duties satisfactorily. Some activities, however, such as preparation of delivery sets and emergency care equipment, needed closer supervision.

(b) Recommendations

Selection

(1) Selection criteria should emphasize mature personality, good health, a good attitude toward people and a minimum educational standard.

(2) The selection examination should be standardized to insure validity, reliability and justice.

Curriculum

(1) To the maximum extent possible, the curriculum for HAs should be problem-based.

(2) Curriculum implementation should be considered more carefully, especially its duration. Other factors needing careful consideration are the site of training, the most appropriate teaching style, and a relevant evaluation approach.

(3) We favor more training for trainers in appropriate teaching methods, and their evaluation.

(4) An adequate supply of educational materials should be available.

(5) More trainers should be provided for the practical parts of the curriculum. Trainers in both theoretical and practical matters should understand thoroughly Program objectives.

(6) Available training materials should reflect the future roles and tasks of HAs.

(7) Integrated learning, i.e., blending the theoretical and practical, should be encouraged to enhance knowledge and skill.

2. Nurse Practitioners

Six-month and one-year courses were designed to train public health nurses and registered nurses to provide direct outpatient care at district and provincial hospitals, and supervise care and other activities at tambon health centers.

The training program reached only 58.5 percent of the target due to uncertainty as to how many nurse practitioners (NPs) were needed by different institutions. Because the career structure for nurse practitioners with the MOPH remains unclear, there was little incentive to participate.

(a) Findings

Most nurse practitioners assigned to take full charge of outpatient medical services at the provincial hospital were found later to spend only 40 percent of their time in curative work. Other nurse practitioners spent only 10 to 20 percent of their time on direct patient care, usually because they were assigned to other duties or not accepted by the physicians. Those NPs working at the district hospitals and provincial offices were able to spend 61 and 82 percent of their time, respectively, supervising PHC-related activities.

In general, the NPs were well-received by their colleagues, and patients were satisfied with their performance.

(b) Recommendations

(1) Care must be taken to insure that recruited RNs or PHNs are posted appropriately after training. Policy on this key issue should be clear and well-planned.

(2) The curriculum should be problem-based.

(3) The NP should be strongly encouraged to provide supervision for tambon health personnel on a regular, frequent basis.

(4) Cooperative refresher courses between provincial and district hospitals will help sustain NP training.

3. Training Physicians and Nurses as Instructors

A two-week workshop was organized for physician and nurse instructors from different training institutions. Their trainees were to provide 4 months of training in medical care for tambon health personnel. The main objectives of this training program were to strengthen the teaching skills of teachers.

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(a) Findings

More than 80 percent of the trainees were satisfied with the content of the course and their learning experiences. The trainees believed they could make use of the prepared learning modules in training tambon health workers.

(b) Recommendations

(1) If repeated, this training course should be shortened to one week.

(2) A short orientation (2-3 days) for all trainers would help them to understand better the goals of the course and the task to be performed.

4. Tambon Health Personnel

A four-month program was designed for auxiliary midwives and junior sanitarians working at tambon health centers and midwifery centers. The course objectives were to upgrade the knowledge of tambon health personnel in basic medical care, including minor surgical procedures, treatment of wounds and accidents, care of common diseases, use of laboratory services, identification of serious conditions, emergency care, and indications for referral of patients to hospital.

(a) Findings

(1) A process evaluation showed that practical training conducted at community hospitals was more effective than that given in the provincial hospitals. Because of this finding, the site of training was changed. The learning modules on medical care developed for tambon health personnel were found to be useful. All of the trainees were posted to health centers in the 20 project provinces.

(2) The trainees provide good quality clinical services. Unfortunately for the total PHC program, however, many tambon health workers spend most of their time in curative care activities, waiting for patients to come rather than working in the community. Utilization of health centers by villagers is still low. (See Appendix C, pp. 3-4)

(b) Recommendations

Selection

(1) Health personnel recruited for this training should be responsible, have a good performance record, and have a positive attitude toward community development.

Curriculum

(1) Based on trainee response, this training program should be extended to six months. Practical instruction at each hospital should last no less than 3 weeks and be chiefly problem-based.

(2) The practical training at the community hospital must be well prepared to avoid overlap with other training programs during the 4-month period.

(3) Audio-visual equipment and educational materials should be available at the involved community hospitals.

(4) The number of trainers should be increased to provide adequate supervision for trainees.

5. Nurse Instructors

A two-month training program was organized by the MOPH Nursing College Affairs Division for nurse instructors at nursing colleges and MCH center/midwifery schools. Later, these instructors helped give the four-month training course for tambon health personnel. The purpose of this training program was to upgrade the basic medical care and supervision skills of nurse instructors.

(a) Findings

In general, trainees were satisfied with the program, but requested more problem-based instruction during the course. Most of the trained nurse instructors were able to organize their assigned training programs for tambon staff effectively. It was suggested to us that RNs at district hospital might take the training course because they also supervise the practical clinical training of tambon health personnel.

(b) Recommendation

The training program should include problem-based learning in its curriculum.

6. Deputy District Health Officers (DDHOs) and PHC Supervisors

A four-week training program was developed for Deputy DHOs and other supervisors of PHC activities. A main objective of the course was to develop coordination and supervisory skills to support provincial, district and tambon PHC activities. A second objective was to learn to collect data on disease surveillance and then use it for local management.

(a) Findings

After training, most DDHOs were able to perform their tasks more effectively. A few had difficulty in operating and understanding the disease surveillance and management information system, however, suggesting the need for more intensive training. Some trainees were not fully involved in PHC supervision because their superior did not understand their new role.

(b) Recommendations

(1) Training should include more sessions on the collection, tabulation and interpretation of routine surveillance and management data.

(2) More orientation of DHOs will be necessary to insure that DDHOs use their training maximally.

7. Child Nutrition Center Attendants (CNCAs)

This two-week training program was designed to train female semi-volunteers with an interest in child care and nutrition. The course focussed on child care, food preparation for children, and child nutrition. The training target was achieved.

(a) Findings

MOPH/PAFU has observed that the performance of CNCAs was satisfactory. We find no objective data with which to evaluate their performance.

(b) Recommendation

Objective followup evaluation will be needed to establish that CNCAs have retained their skills.

8. Training in Primary Health Care

Tambon trainers

Tambon health personnel were given a five-day training course to prepare them to train VHV's and VHC's. The course emphasized the concept of primary health care and how to train VHC's/VHV's. The training target was achieved.

Village Health Communicators (VHCs)

A five-day orientation course was conducted by tambon health trainers for villagers selected as VHCs. The training focussed on community health problems and community organization. The training target was achieved.

Village Health Volunteers (VHVs)

VHVs were selected from among the trained VHCs and given a fifteen-day course in giving simple care for health problems seen commonly in the village.

(a) Findings

1) Followup and supervision of VHVs by tambon health personnel has not been intensive enough. Because scheduled followup has been irregular, the progress of the PHC program in some districts has been slower than expected.

2) Because VHCs often do not really understand their roles, villagers receive inadequate information.

3) VHCs are volunteers. Because they have to make their own living, some have very little time to participate in community development activities.

4) The majority of VHVs perform their tasks effectively.

(b) Recommendations for VHCs/VHVs to promote PHC

1) The village committee must work more closely with tambon health personnel to select VHCs and VHVs.

2) In order to encourage DHOs and DDHOs to supervise tambon health personnel more regularly, transportation allowances must be adequate.

3) In order to encourage tambon health personnel to supervise VHVs and VHCs more regularly, transportation allowances and other incentives should be considered.

4) More information should be provided to VHVs on the results of their activities. It is not clear that the value of a management information system in meeting village PHC needs is appreciated by volunteer workers.

9. District Health Officers (DHOs)

Administrative training of four weeks for the DHOs of 20 provinces was planned. The content of training included the following topics: personnel management, financial management, construction of health facilities, logistic management, communication within the health system, planning, and using a management information system.

The training sites were selected to maximize on-the-job training. Trainers were also DHOs who had been trained in management. The training program was started in FY 1982 and completed in FY 1983. A followup evaluation was carried out 3 months after training.

(a) Findings

- 1) DHOs have positive attitudes and showed better performance in personnel management following training. Supervision remained below standard, however, mostly due to lack of manpower and facilities.
- 2) Planning activities and the management information system seem more efficient than before training. Monitoring and evaluation activities, however, are still inadequate.
- 3) Many DHOs still are not confident with financial management.
- 4) Some DHOs do not apply their knowledge to management of logistics.

(b) Recommendations

- 1) The MOPH or PCMO should set up periodic refresher courses in selected administrative issues for DHOs so that improved job performance can be sustained.
- 2) More resources are needed to enable DHOs to supervise tambon health personnel and villagers in their districts.
- 3) The MOPH should allow DHOs to adapt managerial requirements to suit local needs.

A.2 Training - Phase 2 (Nutrition)

The second phase of the project focussed on 1,200 villages in 37 poverty-stricken provinces began in 1983. In 1985 the project was expanded to 600 additional villages in the same geographical areas. The aim of this first phase 2 project was to eliminate 3rd degree, and reduce 2nd and 1st degree malnutrition among pre-school children. Training toward this objective began in 1983, and involved 25 master trainers, 185 provincial trainers, and 1,110 district trainers. Trainers were recruited from 4 major departments involved in rural development, i.e., Community Development, Agricultural Extension, Primary Education, and Health. The provincial and district trainers trained 2,331 tambon trainers and these trainers in turn trained 27,215 VHV's, VHCs and mothers in the 1,781 villages. The community nutrition activities in the villages including regular weighing of children in the target age group, recording this information on a special folder (growth chart) kept in the home, and producing food supplements from locally available ingredients for children needing them. To support these activities, a revolving nutrition fund was organized under community control. The current status of nutrition training efforts can be seen in Table IV-2.

(a) Findings

(1) Cooking utensils, food grinders, monitoring boards, and scales for producing supplementary food and weighing children were found and are in use in the villages we visited.

Table IV-2 Number of Trainers and Personnel Trained in Nutrition as of 1985 (Phase 2)

Training Program (Categories)	Target	Achievement	Percent	Responsible Organization
Master Trainers	25	25	100	Nutrition Div.
Provincial Trainers	185	185	100	"
District Trainers	1,100	1,100	100	"
Tambon Trainers	3,750	3,348	89	"
VHCs/VHVs/mothers	27,000	27,215	100	"

(2) VHV's/VHCs and tambon health personnel seem to understand the principles of the community nutrition.

(3) VHVs and tambon health personnel are willing to help prevent or treat nutritional problems among children under 5 years old, but some mothers do not cooperate fully with the program.

(4) A majority of village mothers, especially poor mothers, still do not seem to understand the basic facts of childhood nutrition.

(5) Well-to-do mothers in the village often do not have a positive attitude toward community nutrition. It seems likely that many of the targetted communities do not see childhood malnutrition as their most pressing problem.

(6) The training modules are attractive and the content is relevant to community nutrition. The evaluation of training modules indicated trainee satisfaction.

(7) The majority of village children did not like the original supplementary food, but are satisfied with the modified formula.

(b) Recommendations

The nutrition training program was found satisfactory by trainees and trainers. A retraining program for trainers at the provincial, district and tambon levels should be planned by the PCMO. As part of this retraining, the Nutrition Division should provide a broad outline of the national plan and quality learning materials. RTG personnel at the tambon level, including health personnel, educators, agricultural extension workers, and community development workers, must support, and work closely with VHCs and VHVs to ensure community participation. On-the-job training in community nutrition for these villagers should be stressed.

Nutritional education for school children must be relevant to available community resources.

A.3 Training - Phase 2 (Diarrheal Disease Control and Sanitation)

Phase 2 also included training for village sanitation, safe water supply, and diarrheal disease control. These activities were added to the overall project in 1985. The aim was to reduce diarrheal morbidity and mortality in 1,000 poor, target villages. Activities under-taken with this aim in mind included training village sanitation craftsmen (VSC) to construct latrines and jars to collect rain water, training for the production, distribution and promotion of the use of ORS in the villages, and special training activities to improve cholera surveillance in 6 endemic provinces, not all of them impoverished. To promote sanitation activities, a revolving development fund was organized in all villages.

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Among the specific targets of this set of activities was availability of ORS to 80% of children under five and use of ORS by 50% of diarrheal cases in this age group. Access to safe drinking water was to increase from 10 to 25% of the population in the target villages. For sanitary latrines, the comparable figures were 20 to 40 per cent in the two year period. The number of cholera cases was to be reduced by 50% in the endemic provinces.

The scope of training in this phase 2 activity can be seen in Table IV-3.

Table IV-3 Number of Personnel Trained in CDD and Sanitation as of September 1986 (Phase 2)

Training Program (Categories)	Target	Achievement	Percent	Responsible Organization
A. Control of Diarrheal Diseases				
<u>In poverty Area</u>				
1) Tambon Health Personnel	2,200 (666)*	2,164	98.36	DCD**
2) VHCs/VHVs	15,000 (27,000)*	14,848	98.98	DCD
3) Tambon Doctors	330	309	93.64	OPHC
4) Community Health Workers	119	-	Cancelled	-
5) Primary School Teachers	3,000	-	Cancelled	-
6) Physicians of Community Hospital and DHO's Personnel	220	253	115.00	DCD
7) DHO and CH's Staff	330	314	95.15	DCD
<u>In Nonpoverty Area</u>				
1) Tambon Health Personnel	1,600 (2,450)*	1,540	96.25	DCD
2) VHCs/VHVs	7,000 (15,000)*	6,726	96.08	DCD
3) Personnel in Cholera Endemic Areas				
Physicians	60	25	41.67	DCD
Health Personnel	300	355	118.33	DCD
4) Staff of Sentinel Sites	30 (200)*	30	100.00	DCD
B. Sanitation				
Village Sanitation Craftsmen	1,000	1,027	102.7	SD***
	28,216	27,591	97.78	

Note: * Original targets are revised since MOPH received some grant funds from UNICEF for training of about 3,500 health personnel and 8,000 VHCs/VHVs in 1984-1985.

** DCD - Division of General Communicable Diseases.

*** SD - Sanitation Division

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(a) Findings

- (1) VSCs are performing their job effectively.
- (2) The VHVs, VHCs, and tambon health personnel understand well the management of diarrhea with ORS.
- (3) The intensity of cholera surveillance, following training, has increased.

(b) Recommendations

- (1) The training program for VSCs was effective. If retraining for VSCs is needed, the original training program can be modified to suit local needs.
- (2) Regular feedback of cholera surveillance findings will sustain the morale and interest of the trainees.
- (3) VHVs, VHCs and community leaders will need more encouragement in teaching villagers the basic principles of hygiene and environmental sanitation.

A.4 Overview of Training

(a) Lesson Learned

Category	Positive	Negative
Policy	Policy clearly stated that (a) PHC is a tool to achieve HFA, and (b) human resources need strengthening in the villages and among tambon and district health personnel.	-
Funding	Without support from USAID, the training program might have been delayed and possibly less effective than it was.	A few trainees responded inappropriately to training incentive. They were more money than community-oriented.
Recruitment of trainees	Criteria set up to select trainees were reasonable.	While the principles of recruitment were good, in practice they were not always followed, leading to many unqualified trainees.

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Category	Positive	Negative
Recruitment of trainers	-	Potential trainers were not screened for their attitude toward teaching.
Training for trainers	The program for training the trainers seemed effective.	-
Learning modules	The learning modules were useful for trainee at each level of health personnel, and also for the villagers. The structure and content of the modules were revised, as necessary, to suit the needs of trainees.	Sometimes modules were not finished on time, causing problems for trainer and trainee.
Audiovisual aids	Audiovisual aids were adequate for training at the provincial and district levels.	The supply of audiovisual aids at the tambon level was inadequate.
Teaching method	Most of the trainers felt confident in this area.	Some tambon health personnel were not confident teachers.
Communication	-	In some cases, trainers from provincial offices had difficulty in communicating with villagers.
Curricula	Most curricula were integrated.	Too few curricula were problem-based.
Evaluation	Process evaluation was undertaken frequently and led, in many cases, to the improvement of training activities.	The emphasis on pre- and post-test evaluation led to relative neglect in later performance evaluation.
Monitoring and follow-up	-	Inadequate monitoring and follow-up at every level of training.

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(b) Who Should be Responsible?

The following organizations should be responsible for future PHC training activities. We feel that OPHC should involve itself more in the design of training programs and serve as a central source for current information on the state of training. The following recommendation for training and re-training are based on the existing MOPI infrastructure.

1. Policy on human resources development should be included in the 6th national health plan. Health Planning Division
2. Strengthening the training for each category of health staff, especially the peripheral health personnel. Content should include attitude toward PHC, PHC management, and curative care. Health Training Division
3. Curricula should be revised to suit the practical needs of trainees. This implies a vigorous evaluation program at the time of training, and continuing observation for a substantial period of time. Health Training Division
4. Strengthening learning modules and "distant" learning e.g., through the mail, TV and radio for junior health personnel. Health Training Division and Office of Primary Health Care
5. Research and information on PHC should be collected in one place. Office of Primary Health Care
6. Career ladder or other incentive for tambon health personnel must be planned and implemented. Health Training Division and Health Planning Division

B. RESEARCH AND EVALUATION

1. Current Status

Research under the Project atrophied after 3 of the planned 9 studies were completed. The reasons for this situation were well-documented in the RPHCE Project Midterm Evaluation Report (see Appendix E), but never resolved fully. Separately funded studies have addressed topics in the PHC program, e.g., NESDB/PRICOR on community funds, Division of Nutrition on malnutrition levels, and Mahidol University on field trials of nutritional supplements, but no coordinated program of operational research in PHC has yet been implemented.

Service statistics on PHC activities are collected at the periphery. These include information on visits to village workers by reason. Data for 1984 is summarized by province and region in a recent publication from the OPHC. We are not aware of any published data that establishes trends in specific village activities. Most of the MOPH Divisions with PHC involvement keep their own statistics on activities relevant to the Project, e.g., Sanitation Division and information on accessibility of safe drinking water and latrines over the Kingdom, or Rural Health Division and information on outpatient and inpatient visits by year to health centers, district, and provincial hospitals.

2. Findings

a. Early research on training activities, the major RPHCE Project phase 1 focus suggested needed corrections at many levels in course emphasis. No longer-term evaluation of the effects of training on behavior change has been done. Nor have there been longer-term observational studies of trainee competency and performance.

b. One of the original three research studies, the "Community Household Survey of Environmental Health Conditions, Perceived Sicknesses, and Utilization of Health Service Resources" was useful in establishing baseline levels, but a followup study to measure change has not been done.

c. The NESDB/PRICOR study suggests that the village drug cooperatives and some sanitation funds are working well. The nutritional funds are the weakest, however, and many appear to be decapitalizing.

d. The service statistics system is not well-used by health workers at the periphery and does not seem to flow centrally in a timely way. It is too numerator-oriented, i.e., with more attention to the target population (denominator) progress toward complete coverage could be estimated quickly at any level.

e. The published breakdown of PHC activities by province is not discrete enough to identify successes and difficulties at tambon and village levels.

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f. The service statistics collected by MOPH Divisions involved in PHC do not appear to be coordinated by the OPHC. It is not clear whether the Office of PHC requests special tabulations of routine vital data, e.g., acute diarrheal episodes and deaths among under 5s by province, district or tambon, that could evaluate the effectiveness of the system and its stated targets more effectively.

3. Lessons Learned

a. Research activities are difficult to conduct in a busy, operationally-oriented Government Ministry. The potential value of research findings may not be seen as relevant or timely as impressions gathered by experienced observers of the health system.

b. The lack of a strong research and evaluation cell in the OPHC has made it difficult to coordinate involved MOPH departments and insure that a carefully directed program of operations research is carried out.

c. In Thailand, grant funds are a more flexible source of support for research than loans.

4. Recommendations

a. Early steps should be taken to reinforce the OPHC's research coordination ability. Many of the needed operations research studies can be subcontracted to Thai universities and Thai development-oriented institutions. A stronger OPHC will be able to look over data from other MOPH divisions on a routine basis, and request special tabulations as indicated.

b. A committee should be organized to review PHC data collection forms. They need simplification, and reorientation to coverage targets for the various interventions.

c. Begin a quarterly report on PHC activities based on more discrete analysis of performance than has been available to date.

C. NUTRITION

1. Current Status

The discovery by the MOPH's Nutrition Division in 1980 that
(a) levels of malnutrition in preschoolers were higher than expected and
(b) that a long-standing weaning food program served only a small proportion of the target population and had produced no measurable change in nutrition status both led to a thorough policy review. Subsequent multi-sectoral, pilot intervention studies in Ubon, Udorn and Korat

provinces (Innovative Village Nutrition Project) showed that, within the PHC context, local production and distribution of supplementary foods led to significant reduction of serious malnutrition in some tambons over a 6 month period. Based on this study and a field trial of locally produced supplemental foods in Chiangmai, the MOPH began introducing preventive nutrition activities into the PHC structure nationwide. At first, 5,000 villages were targetted for the new nutrition strategy in 1982-1983. The Phase 2 USAID support was at first limited to 1,200 of these villages in 1983, but 581 more were added in 1985.

By the end of 1985, 25 master trainers from four Departments (Community Development, Agriculture Extension, Primary Education, and Health), 185 provincial, 1,100 district, and 3,348 tambon trainers had been reoriented to the new nutrition policies under the RPHCE Project. They in turn trained 27,215 VHV's, VHCs, and mothers in the 1,781 villages.

Commodity procurement for central monitoring and for production of supplementary food and weighing of under 5s in the village was completed in a timely manner. Village nutrition funds were established in all villages and the weighing program began in 1983.

2. Findings

a. The inter-sectoral training program is commendable, but it is not clear how Departments other than the Health contributed, and continue to contribute at the village level.

b. There are anecdotal reports that many villagers still do not fully understand the need for nutritional intervention. Because of the nature of this information, the extent of misunderstanding remains unclear.

c. Half the villages are said to be producing supplementary food regularly. It has been given free to 2nd and 3rd degree malnourished children, but the mothers of healthy children are said to be reluctant to purchase it, leading to slow decapitalization of many of the revolving nutrition funds.

d. Growth monitoring activity is increasing, but coverage of the target population of pre-schoolers remains seriously incomplete*,

* We estimate crudely that coverage was less than 40% of under 5s (39%) in June 1986.

making the surveillance data unreliable for assessing nutritional change. While severe malnutrition clearly is rare, we cannot say whether the targetted nutrition levels have been achieved. A new study from the Nutrition Division suggests that children who are not routinely weighed tend to be more malnourished than those who are.

e. The growth chart given to the mothers in most villages is very well-designed, and will help promote MCH education in the PHC villages.

f. We find little evidence that case-finding of malnourished children is actively pursued in many villages. Rather, a passive, curative orientation still seems to prevail.

g. Little attention seems to have been given to the nutritional status of pregnant women, perhaps because of incomplete understanding in the village of the importance of maternal nutrition to birth weight. The protection of under 5s begins with a live born baby, mature by weight.

h. Given the scope of the effort, nutritional activities under the Project appear well-established, and are extending their impact. The growth monitoring activity is a clear programmatic success, even if the data generated are not useful in evaluating progress toward nutritional goals for under 5s.

3. Lessons Learned

a. Change in attitudes of villagers toward better nutritional practices for mothers and children is a long-term proposition. It needs continuous reinforcement from many sources. Nevertheless, village women, in most cases, will voluntarily donate labor to produce supplementary foods.

b. As currently organized, nutrition revolving funds may be the least viable of all the community funds. A new NESDB/PRICOR study supports our field impressions.

c. The taste of supplementary food must be adjusted to meet local preferences. Many villages have already done this on their own. In villages where nutritional supplements are less needed, shelf-life will be a factor in the long-term effectiveness of the activity.

d. If longitudinal growth monitoring data remains seriously incomplete, the information will not be a reliable guide to current nutritional status.

4. Recommendations

a. A program of refresher training in nutrition activities should be carried out at the village level by health center personnel. The first priority will be less-active village in the PHC system.

b. Consider using the mass-media, especially television, to promote attitude change in the villages and greater cooperation with the growth monitoring activity.

c. Systematically study the operation of the revolving nutrition funds to see what adjustments, if any, are indicated.

d. Following the UNICEF-sponsored survey now in progress, begin plans for a new cross-sectional sample study of nutritional status among pre-schoolers to be conducted about 1987 in the target areas. The Demographic and Health Survey, now under pretest, may satisfy this need, but will generate nutritional information only on children under 3.

e. Consider a program of operations research studies addressed to the critical issues in PHC nutrition activities.

f. Now that birth rates are down, nutritional programs for pregnant women aimed at raising birth weight should be manageable. This emphasis should become a priority issue in village re-training.

D. DIARRHEAL DISEASE CONTROL AND WATER AND SANITATION

The second phase of the RPHCE Project started in 1983. Its first activities were in community nutrition. Later, in 1984-1985, diarrheal disease control activities, and then a water supply and sanitation activities were included to achieve several specific goals. Reduction of diarrheal mortality and morbidity, especially among children under 5 years of age, was a major objective. The Project provided funding for promotion of ORS/ORT within the official health, and community PHC structures. Intervention to support the improvement of village water supply and sanitation also supported this broad objective, as did cholera surveillance and control activities in several endemic provinces. Training target achievements were shown in Table IV-3.

1. Diarrheal Disease Control

a. Current Status

The RPHCE Project was grafted onto the much larger MOPH NCDDP. The Project training programs focussed on clinical and managerial issues, strengthening of laboratory capability, and diarrheal disease

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surveillance, especially for cholera. Two sentinel sites for cholera surveillance are in operation. The Project stimulated production of ORS and promoted its use within the PHC structure. Careful attention was given to availability and prolongation of ORS shelf-life.

b. Findings

(1) One of the main aims was to promote ORT at home using a solution made from ingredients available in almost every rural Thai household. Starting ORT early after the onset of diarrhea, severe dehydration and hospitalization might be prevented. Based on a limited number of interviews, it appears that the early use of ORT at home seems to have increased over the 1983-5 period but not as much as hoped. Many mothers continue to bring their sick children directly to the health center or hospital. This might possibly be the main weakness of the program.

(2) Health officials still do not agree on whether home-prepared ORS should be used for mild cases of diarrhea in children rather than the GPO ORS. Training programs have thus reflected different opinions on the question. This situation may explain the finding above (1).

(3) Available evidence suggests that GPO and private ORS supplies are available almost throughout the country. Because of better taste, flavor, and intensive advertising, however, the private ORS product (complete or incomplete) is more popular.

(4) Few of the hospitals we visited have used their ORT units to help villagers understand ORT, and the proper use of ORS for their children.

(5) Understanding of ORT among health personnel, and the people, tends to be limited to the use of ORS solution for cases of diarrhea in children. The continuation of feeding during diarrhea is an essential part of case management under ORT.

(6) The use of antibiotics and antidiarrheal drugs may be more popular than ORS among parents of children under 2 with diarrhea.

(7) Because the private sector produces and markets many different packet sizes and formulae, potential users may be confused.

(8) Many studies indicate that the most common route of transmission of cholera, for example, endemic biotype El Tor, is through personal contact and food contaminated by infected food handlers. The RPHCE Project attempted no interventions addressed to this mode of transmission.

(9) Two sentinel cholera surveillance sites are functioning. The number of stool specimens (suspected cases) has increased.

c. Recommendations

(1) ORT practice information and demonstration should be provided to rural mothers frequently in appropriate ways.

(2) Recognizing the danger of acute diarrhea in small children under 2 years who are more likely to develop rapid dehydration, instruction on use of ORS should emphasize giving the complete formula. The criteria for case-referral must be made known to all, especially mothers in rural communities.

(3) Referring to recommendation above (1), GPO and private ORS supplies are available almost throughout the country. The complete formula ORS must be strongly recommended for the treatment of diarrheal cases in children under 2 years even or mild cases.

(4) The more palatable, long shelf-life ORS is required for most village drug cooperatives in remote areas. We recommend the new ORS formulation for GPO production, i.e., replacing sodium bicarbonate with trisodium citrate.

(5) Availability of ORT teaching units in hospitals, especially community hospitals, is an excellent way of demonstrating sound ORT practices for health personnel and people, particularly mothers or family members attending the OPD. We propose that an ORT unit be established in all hospitals.

(6) To interrupt the main transmission route of cholera in endemic areas, hand washing seems to be the most appropriate and effective control measure. Food handlers, factory workers, and school children should be advised to wash their hands with soap or super-chlorinated water after using the toilet, and before eating/cooking.

d. Lessons Learned

(1) Many health personnel at all levels believe that the use of ORS/ORT will make a major contribution to the reduction of diarrheal mortality. Given this optimism, other essential activities in diarrheal disease control tend to languish.

(2) Unfortunately, many people came to believe that use of ORS could cure diarrhea immediately. It is hard to understand that ORS, by first replacing fluid and electrolyte loss, prevents death from dehydration and its complications, and allows the patients normal defense mechanisms to promote recovery. More public education addressed to this misunderstanding is indicated.

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(3) A minority of health professionals continue to regard ORT as a second-rate treatment. They continue to advocate more sophisticated modes of treatment, e.g., intravenous solutions despite clear evidence of ORT effectiveness and efficiency in helping to cure diarrhea.

2. Water Supply and Sanitation

a. Current Status

A 1980-1983 review of selected data on morbidity and mortality from gastrointestinal diseases, including acute diarrhoea, indicated that the majority of rural population, especially children, were in poor health because of the high prevalence of water and food-borne disease. The major contributors to this health problem were poor environmental sanitation and lack of a safe water supply. Therefore, safe water supply and sanitation activities were added to the second phase diarrheal disease control activities. The goals included reduction of gastrointestinal diseases, including parasitic infections among children under 5 years.

Implementation during 1984-1985 was confined to 1,000 poor villages in the 34 poorest provinces. Altogether, 4,000 rain water cisterns, 20,000 water jars, 5,000 household filters and 25,000 water-seal latrines were to be built in these villages by the end of the Project. Our assessment confirms that both activities, insuring adequate supplies of safe water, and constructing latrines are off to a good start. Although project activities were, for the most part, added only in late 1985, organization of village-sanitation revolving funds, training courses, and material and commodity procurement were carried out quickly and effectively. While the number of rain water cisterns and water jars approached the target, construction of water-seal latrines and household water filters fell behind schedule. As discussed earlier, we estimate that household availability of safe drinking water and latrine access have increased from 17 to 30 percent and 26 to 33 percent, respectively, in the target villages.

b. Findings

(1) The installation of 16,000 water jars (1,000 liters each) almost reached the target. The major reason for this success was the strong support by the Ministry of Interior through the provincial governors in order to commemorate the King's 60th birthday in 1987. This gave the project very high priority. Another factor was the activity's relationship to the promotional activities of the "Decade of Safe Water Supply".

(2) Household filters were not well-accepted among rural people, and may not always be necessary in targetted areas of the Northeast and Southern regions.

(3) The cost of installation of sanitary latrines and rain water cisterns was too high for many low-income families. Loans from the revolving sanitary fund could not be paid back quickly. In some villages, decapitalization may have occurred. In others, the fund is revolving more slowly than anticipated. In fact, the number of latrines built is increasing, but more slowly than planned. It may be that many latrines are used by more than one family. To the extent that this is true, coverage could be underestimated.

(4) We found similar projects with the same objectives implemented in the same villages of many provinces. Their different requirements created many problems for both health administrators and local PHC workers.

(5) Information about health, particularly concerning the considerable benefit of a safe water supply and sanitary latrines was not transferred effectively to villagers.

(6) Because many rain water jars are not properly covered, the water becomes contaminated and serves as a breeding place for insect vectors of disease.

c. Recommendations

(1) Requirements and/or regulations passed from central to implementing levels should be more flexible. The decision to select types of rain water containers should be based on local and provincial considerations.

(2) Resources from various donor organizations with similar objectives, should be pooled at the provincial level. Their use, consistent with the objective, should be guided more by local authorities at provincial and district levels.

(3) Where villagers are too poor to participate in the project, consideration should be given to subsidization.

(4) To correct the apparent lack of appropriate knowledge transfer from health personnel to villagers, a school-based approach might be helpful. Children will carry the information back to their parents. Many studies have shown the effective impact of this approach.

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(5) Although rain water is regarded as safe and clean at the time of collection, it can be contaminated before it is ingested. Contamination can occur in many ways, including uncovered jars, carrying containers, or in handling the water. Training programs in the village should emphasize that proper handling of water is essential.

(6) The use of sanitary latrines may decrease environmental contamination from particular intestinal parasitic diseases. However, increased use will not directly affect hand-to-mouth contamination, the most common route of disease transmission. Hand washing and improvement of food and personal hygiene must be promoted in parallel with this effort.

d. Lesson Learned

(1) The use of diarrhea incidence as a measure of the impact of safe water supply and sanitation may not be as appropriate as other measures. The increasing use of ORT at home will reduce significantly the number of diarrheal cases attending health facilities. In addition, diarrhoea caused by rotavirus is very common among children under 2 years of age, and will persist no matter how good the water supply and sanitation facilities are. It will continue to be necessary to promote breastfeeding, proper food supplements, and general cleanliness should be promoted in parallel with these measures.

(2) It appears that many rural people have accepted water jars and latrines not because they recognized their value in disease prevention, but rather for the sake of convenience. Many have become accustomed to using latrines after working in the cities or in labour camps in the Middle East.

(3) The concept of PHC may be too broad for many health personnel at the local level, and villagers. It is logical that the priority goal of PHC should be the reduction of morbidity and mortality in children under 5 years, but the primacy of this goal is not always recognized in the field. Diseases or health problems must be identified, and then reduced to a limited number that health personnel and villagers can combat effectively. In the area of diarrheal diseases, the measures directed at reducing the incidence of diarrhea must be emphasized so that health personnel can carry them out effectively.

(4) At present, there are too many projects and special programmes assigned to health workers, particularly those at the peripheral level, including the VHV's. Considering their educational background and limited experience in health services, these assignments are likely to be done superficially. If so, no impact will be seen. To encourage good morale and effective action, clearer priorities need to be determined.

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USAID/THAILAND

RURAL PRIMARY HEALTH CARE EXPANSION PROJECT FINAL EVALUATION

SCOPE OF WORK

I. ACTIVITY TO BE EVALUATED

This evaluation will assess the Rural Primary Health Care Expansion (RPHCE) Project, AID Project No. 493-0291 being carried out by the RTG Ministry of Public Health (MOPH).

The RPHCE Project provides \$6.983 million loans in foreign exchange as well as local currency to support the MOPH's research, training, and community PHC interventions from May 3, 1978 through the PACD of October 31, 1986. More specifically, the project finances technical assistance in research and training coordination, training of health personnel in curative care and PHC operations, training of village level PHC workers (volunteers), and rural community interventions including nutrition, diarrheal disease control, and water supply and sanitation. RTG contributions to this project are approximately \$21.6 million.

II. PURPOSE OF THE EVALUATION

The overall purpose of this evaluation is to determine the achievements of the RPHCE project against its stated objectives as well as its contributions to the overall MOPH's programs on PHC network, community nutrition, diarrheal disease control, and rural water supply and sanitation. Lessons learned from the USAID-funded activities and recommendations for bridging the gaps of these activities will be used by the MOPH in modifying its policy and implementation strategies and by USAID in adjusting its assistance programs. It is expected that the findings and recommendations will be useful for the MOPH in implementing its 6th Five Year Plan beginning 1987.

The immediate users of the findings and recommendations are the MOPH's divisions in charge of the PHC activities.

The Project Paper calls for a final evaluation upon the termination of the project with respect to the effectiveness and efficiency in attaining the specific goals and objectives of the project.

This evaluation is scheduled according to the evaluation plan approved by USAID to take place in late FY 1986.

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III. BACKGROUND

This project was begun in 1978 with the aim of making primary health care (PHC) services more readily available to the rural poor in selected disadvantaged villages. The project life can be divided into 2 phases, phase 1 from 1978-1983 and phase 2 from 1983-1986.

During phase 1, the project was implemented in 20 disadvantaged provinces, in conjunction with the World Bank-funded Population Project, managed by the MOPH's Office of the Permanent Secretary. The project activities included:

- (1) Short-term training of health personnel and village level PHC workers or volunteers, e.g, health assistants in MCH and family planning, nurse practitioners, medical/nurse instructors in teaching-learning process and curative care, Tambon (sub-district) health personnel in curative care and in PHC program operations, health personnel at middle level in management, and village health volunteers (VHV) and village health communicators (VHC) in basic health care. Altogether, 9,095 health personnel and 112,973 VHV/VHC were trained during that period covering about 8,000 villages out of 57,000 villages throughout the country. The training of trainers and VHV/VHC was simultaneously carried out in other villages of other provinces through the RTG and UNICEF-WHO support.
- (2) Research and evaluation studies. The project funded 3 studies as follows:
 - Evaluation of Effectiveness of Health Personnel Training Program -- by the Health Planning Division, MOPH 1981
 - Community Household Survey on Environmental Health Conditions, Perceived Sickness and Utilization of Health Services Resources -- by the Health Planning Division, MOPH, 1982
 - Evaluation of Performance of VHCs/VHVs -- by the Health Planning Division, MOPH 1981.

Dr. Michael Maurier, a health research consultant, was contracted from September 1979 to April 1982 to provide technical assistance and help coordinate studies that were being carried out by other institutions with grants under the MOPH-World Bank Population Project.

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Phase 2 of the project began in 1983 when it focused its support firstly on community nutrition and later, in 1984, on diarrheal disease control including rural water supply and sanitation. During this phase, the project aimed at the reduction of malnutrition among pre-school children, the establishment of a health information system, and the reduction of morbidity/mortality due to diarrheal diseases. Activities related to the community nutrition interventions include the training of trainers, VHV/VHC and mothers in 1,781 selected villages in the poverty-stricken provinces. Equipment, supplies and start-up funds were provided to project villages to carry out growth monitoring, nutrition education, supplementary food production and distribution, and the establishment of nutrition revolving funds.

To partly support the national control of diarrheal disease (CDD) program, the project finances the training programs for health personnel and VHV/VHC in poverty-stricken provinces and the provinces in cholera endemic areas. In addition, the project provides audio-visual equipment and supplies in support of training and public education activities, and oral rehydration salt (ORS) packets for some village drug cooperatives.

To increase coverage of safe-drinking water supply and sanitation in the rural areas, the project finances the training of village sanitation craftsmen (VSC) and provides seed money to the village sanitation funds to help build rainwater cisterns, water-seal latrine, and household water filters. The project covers 1,000 villages in the poverty stricken areas.

Basically, all these activities are carried out by trained VHV/VHC, mothers' groups, VSC and the village committee with support from the provincial/district/tambon health personnel. At the central level, the project is managed by the Project Administration and Financial Unit (PAFU) at the MOPH's Office of the Permanent Secretary.

Technical support and coordination is from the following divisions of MOPH concerned:

- | | |
|--|--|
| Training of PHC trainers and VHCs/VHVs | - Health Training Division
- PHC Office |
| Training in curative care | - Nursing College Division
- Family Health Division |
| Training in management | - Health Planning Division |
| Training of nurse practitioners | - Health Training Division
- Faculty of Public Health, Mahidol University |

Community nutrition	- Nutrition Division
Diarrheal disease control	- Div. of General Communicable Diseases
Rural water supply and sanitation	- Sanitation Division

Almost all of the project activities have been completed. Background for the project can be found in the AID Project Paper, the Project Agreement, reprogramming proposals, the mid-term evaluation report (1980), progress reports and other project documentation available in the project office.

IV. STATEMENT OF WORK:

The evaluators are required to analyse, describe, and make conclusions and recommendations on the following:

1. Describe the overall status and coverage of MOPH rural health programs with particular attention to the following areas: PHC worker training, community nutrition, rural water supply, sanitation and diarrheal disease control.
2. To determine the progress of the project in attaining its output targets and objectives over the 1978-1986 period. Describe factors which are attributable to achieving the targets as well as difficulties encountered in reaching the project targets.

The objectives to be achieved include:

- a. At least 7,000,000 rural dwellers in the 20 provinces were to obtain convenient access and accept primary health care including family planning and nutrition.
- b. A substantial increase, as much as 10 times, in the utilization of MOPH health facilities.
- c. A 50 percent decrease of second degree and an elimination of third degree malnutrition in 1,800 project villages.
- d. District health officers in 240 districts become capable of planning and managing their respective health programs.
- e. Eighty percent of children under five years of age in the poverty areas have access to oral rehydration therapy (ORT) and 50 percent of diarrheal cases practice ORT.

- f. The number of cholera cases in 6 target provinces (with cholera endemic) decreases by 50 percent.
 - g. In 1,000 villages with sanitation activities, the percentage of people with access to safe drinking water will increase from 10 to 25 and those using latrines from 20 to 40.
3. Describe specific lessons learned from the project interventions particularly as compared with similar activities directly funded by the RTG.
 4. Make recommendations on policy changes, management improvements, implementation strategies, funding requirements, communications strategies or other areas indicated by the evaluation results, which will assist the MOPH in meeting its PHC objectives and targets established in the 6th 5-year plan.

Prior to departure from Thailand, the evaluation team will prepare a comprehensive report on the aforementioned for the MOPH and USAID.

V. METHODS AND PROCEDURES

1. The team will analyse the project's progress reports, mid-term evaluation report, and other project documents to obtain data on the achievements of project objectives. The team will meet and interview key MOPH officials in charge of different project activities for further clarification of the achievements, gaps, lessons learned and recommendations. Field visits to 8 provincial health offices, 8 district hospitals, 8 district health offices, 16 health centers, and 16 villages will be made to gain an insight into actual accomplishments at the local level as well as to obtain qualitative information on performance from field staff at all levels and village level volunteers including 3-4 mothers of pre-school children and other 4-5 villagers in each village.

2. The team will obtain the data from the MOPH Project Administration and Financial Unit and other divisions concerned with different project activities described in Section III.

3. The evaluation will begin with one consultant together with a research assistant gathering information and documents from various divisions in early August 1986. The whole team will meet and start the team effort in mid August 1986 and spend about 2 weeks in the field to obtain further information from local health personnel, volunteers and beneficiaries (villagers). After the field trip the team will analyse their findings and write up a report as described in Section VII. A draft report is due at the end of September 1986.

4. The team should read the following documents before beginning the evaluation:

- The Project Paper
- Reprogramming proposals
- Mid-term evaluation report
- Thailand Health Sector Assessment
- WASH Field Report No. 153

5. Word processing services will be provided by USAID. Some secretarial work will be required after office hours during this evaluation period and until the report is completed.

VI. COMPOSITION OF EVALUATION TEAM

1. It is proposed that a three-member team be formed to handle this evaluation. The team members will work under the supervision/assignment of the team leader.

The qualifications of the team members should be as follows:

Team Leader:

- One U.S. consultant will be the team leader. He/she should have extensive experience in PHC management, training and evaluation (6 weeks)

Team Members:

- One Thai consultant designated as co-team leader who is a physician with extensive experience in the Thai health system, organization, operation, training and evaluation (8 weeks). In his contract, provision for a research assistant will be included to help gather and analyse data and information from various sources concerned.
- One physician with experience in public health and familiar with rural programs on diarrheal disease control, nutrition and sanitation (6 weeks)

2. For the purpose of this evaluation, one U.S. consultant will be requested from PRITECH, a centrally-funded project. Two other consultants are also required to work on the joint Thai-U.S. team. A personal services contract (FSC) will be signed between USAID and Thai team members as required.

3. The PRITECH consultant (team leader) will work for approximately 6 weeks, 5 days a week, with remuneration in addition to per diem for the entire period.

4. The other consultants will work for 6 to 8 weeks depending on the type of work he/she will be assigned. He/she will work 5 days a week with remunerations plus per diem while on field trips up-country.

VII. REPORTING REQUIREMENTS

1. Format of the Report

The team members will write up a section of the report on his/her assigned area of responsibility describing his/her findings, conclusions and recommendations. The team leader will coordinate these efforts, and with the assistance from the other consultants put all the pieces together in a proper format, edit the report as appropriate, and present it to the MOPH and USAID.

The team will prepare a written report containing the following reactions:

- Basic project identification data sheet (page 24 of ANE guidelines).
- Executive summary (using ANE guidelines and format, pp 37-47).
- Body of the report describing in brief the country context in which the project was developed and carried out, findings/information concerning the activities stated in Section IV, and evidence and analysis on which the conclusions and recommendations are based.
- A full statement and standard Matrix of conclusions and recommendations. The recommendations should specify who, or what agency, should take the recommended actions.
- Appendices including the evaluation scope of work, pertinent logical framework, evaluation methodology, bibliography, AID evaluation abstract (recommendation matrix), and others as appropriate.

2. Submission of the Report

The report will be written in English. A preliminary draft containing findings and recommendations will be presented to the MOPH and USAID by the end of the 7th week of evaluation period and the final complete draft by the end of the 11th week for formal review. The final report including a Thai translation of the findings and recommendations will be submitted to USAID and the MOPH by the end of the 8th week of the evaluation.

3. Debriefing

The team leaders will debrief the MOPH senior staff and USAID during the last week of the evaluation.

VIII. FUNDING:

1. For one U.S. consultant (6 weeks):

Approximately \$20,000 is requested from the Technology for Primary Health Care Project (PRITECH), a centrally-funded project.

2. For other consultants and other local costs:

Approximately \$7,000 from PD&S funds.

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EVALUATION ABSTRACT

The Rural PHC Expansion Project supports an extensive RTG commitment that in a mere 8 1/2 years has established primary health care services in 85 per cent of Thai villages with 31 million people. Activities supported by the Project in Phase 1, 1978 - 1983, include training, research and evaluation, and in Phase 2, 1983 - 1986, community nutrition, diarrheal disease control, and environmental sanitation. This final evaluation was undertaken by a Thai-U.S. team on the basis of field visits, interviews with Thai officials, review of project documents and other pertinent reports, and independent assessment of health utilization, and morbidity and mortality data. The major findings and conclusions are:

1. A massive training effort has been completed successfully, but longer term evaluation of its impact is needed to guide plans for refresher training.
2. Research and evaluation efforts have not yet been adequate to guide RTG PHC policy through its "adolescence". Many lessons remain to be learned, perhaps through a carefully focussed series of operations research studies.
3. The PHC management information system is not used to guide policy at the local level and does not appear to flow to the center in a timely, useful way.
4. The PHC concept may contain more elements than the voluntary village worker can effectively implement. Priorities may have to be determined based on village opinion and the information generated by the routine information system.
5. The Project has supported effectively the longer-standing Ministry of Public Health's diarrheal disease control program. ORS is widely available and there is surveillance data consistent with recent decline in case/fatality ratios from acute diarrhea.
6. Because Project growth monitoring (surveillance) data is incomplete, it is not possible to say whether malnutrition levels among under 5s have been reduced below levels found in 1980. Other information suggests such a reduction, but needs to be confirmed. Clearly, severe malnutrition is rarely seen in Thai hospitals and villages visited.

7. In just two years, the project has improved access to safe drinking water and provided for better environmental sanitation in 1,000 of the poorest villages. The operation of the village sanitation funds needs further study.

8. Operation of PHC activities in the villages seems not to have stimulated visits to the health centers closest to the villages. These centers remain dramatically underutilized, with villagers bypassing them to visit the district hospitals.

Some lessons learned are:

1. The continuing task of connecting PHC in the villages to the official health system should not be underestimated. A determined policy and supportive leadership at all levels are required.

2. Health education efforts in the village need continuing emphasis, should involve local Government health workers on a regular basis, and may benefit greatly, at least in Thailand, from backstopping through the mass media.

3. The health system will not easily be reoriented to promote prevention. Most health training is centered on curing, and that is also what has the most urgency and value in the popular mind.

memorandum

DATE: September 18, 1986
REPLY TO: Drs. Wichit Mathurospas, Chalodem Varavithya, and Nicholas Wright,
ATTN OF: Consultants
SUBJECT: Rural Primary Health Care Expansion Project, Final Evaluation: Major Findings and Observations: Memo for Discussion at Debriefing, 9/19/86
TO: Director, Dr. John R. Eriksson
THRU: Deputy Director, Mr. Lee Twentyman

For the purpose of this debriefing, we have pulled out for comment and discussion specific objectives from Section IV of our scope of work. In some instances, these objectives will be reinterpreted slightly because the data available to us did not satisfactorily answer the original charge. We also address some questions that were not asked, but might have been. To keep this memo short, we assume general familiarity with the RTG's Primary Health Care (PHC) program since 1978, and USAID's relatively small contribution to that major effort.

Before discussing the objectives given to us, some general background issues must be considered.

Background

1. At the local and provincial levels, very little distinction is made between USAID assistance within PHC and other assistance, mostly from the RTG. This is quite understandable, and possibly a marker of success, but it makes for difficulty in disentangling the USAID inputs within this exciting, ambitious, but sprawling RTG commitment to social equity and better health through community empowerment.

2. Unfortunately, research studies on the eight-year PHC effort are very few. Many of the planned studies under the Population Project, Phase One, were not undertaken because of RTG reluctance to use loan money for this purpose. Those that were undertaken remain as lonely baseline efforts (Health Utilization Survey) or lack a long-term cohort perspective (early evaluation of the massive training efforts). There was also difficulty within the MOPH in contracting with outside Thai research groups to do appropriate research and evaluation. Indeed, USAID opposed such sub-contracts, feeling that the MOPH's Health Planning

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Division needed strengthening. Clearly, the main problems were not resolved, and, regrettably, the amply demonstrated potential of Thai university groups in demographic and health research was not brought to bear on the PHC Project. Finally, it is said that many of the MOPH Divisions involved in PHC activities set up their own research and evaluation units. We see some evidence of this, especially within the Nutrition and Communicable Disease Divisions, but the central office of PHC seems not to have provided sufficient guidance in overall PHC research strategy.

3. While the detailed management information system organized to monitor the PHC effort seems to work at the local level, it is not well-understood there, possibly because of the lack of denominator orientation. Information does not appear to flow to provincial and central levels in a timely, useful way. We sense that management proceeds mostly by impressions and anecdote. While this possibly might be adequate for PHC program administrators, it is not a comfortable, balanced, or reliable means of evaluation by outsiders who only have a brief "snapshot" view of PHC activities.

4. Conversations with MOPH officials have been frank and open. Striking successes and disappointing failures are acknowledged, and discussed in depth. The underlying problem with these discussions, however, is the relative absence of sufficiently focussed special studies and a timely, relevant management information system. Where PHC activities are successful, we often are not sure why. The same is true for failures. After so much dedicated effort and heavy expenditure, this is an uncomfortable situation. Clearly, further philosophic discussion of the PHC concept will not improve our grasp of the activity as much as carefully focussed "operations" research, sound epidemiologic analysis of health outcomes, and a simple service statistics system that delivers up the needed information quickly.

5. Health is not as important a priority in the village as agriculture. This order of priorities makes it more difficult to build an effective PHC system. In addition, the health system is better equipped (and trained) to cure rather than prevent, and many of the targetted village population of mothers and children, accepting the general orientation of the system, tend to seek cures. It is hard even in the developed world to see the "result" (and value) of prevention.

Objectives

1. Access to PHC in the original (1978) 20 provinces is difficult to determine, but data from the Office of PHC (1985) suggests that 63% of the estimated total population of 17.8 million have access to village PHC services. During 1985, 4,873,000 visits were recorded by village health workers, or 28% of the total population (43% of the population with access). In the 20 provinces, the 1985 range of visits among population with access was from 16 (Kanchanaburi) to 93 (Roi Et) per cent. Since individuals may make more than one visit per year, these figures overestimate coverage. We cannot make an independent assessment of this data from the cumulated service statistics. There appears to be no trend data available.

2. Utilization of MOPH health facilities has not increased by tenfold in the 20 provinces. A careful look at raw outpatient visit data (Rural Health Division) from 1982 to 1985 suggests:

	Twenty Accelerated Provinces Outpatient Visits (1982-85)	
	Raw	Corrected for increased number of facilities
Health Centers	Up in 13 provinces Down in 7 provinces	Up in 9 provinces Down in 11 provinces
District Hosp.	Increasing faster than health center in 15 provinces Increasing more slowly than health center in 2 provinces About the same in 3 provinces	Not available
Provincial Hospitals	Up in 18 provinces Down in 2 provinces Increasing faster than health centers in 12 provinces	Not relevant

We conclude that:

a. Attendance at health centers is increasing, but outpatient visits at district and provincial hospitals are growing more rapidly in the majority of the 20 provinces.

b. The health centers remain underutilized. In the best case (Buri Ram) a health center (1985) had an average of 12 visits per day (assume 250 working days per year). In Songkla, however, the average was 3 visits per day.

3. Because weighing data is incomplete (coverage of under 5s said to range only from 40-60%), it is impossible to assess reliably the effect of PHC activities on malnutrition. The problem is selection bias, i.e., the healthiest children tend to be brought forward for weighing. A recent, small cohort study from the Division of Nutrition based on a 100% sample of children supports this point of view. It may be that levels of malnutrition have been brought down by PHC efforts, but the available PHC data do not support such a conclusion. The probability of little change in levels of malnutrition remains quite possible, given our field impressions of nutrition fund activity, availability of supplementary food, and little evidence of active case-finding. A new NESDB study on community financing of PHC in Thailand tends to support this more pessimistic view. Finally, we find almost no evidence that pregnant women have received significant nutritional diagnosis and support. Birth weight is related to maternal nutrition, and remains the most powerful predictor of mortality in the first year of life.

4. District Health Officers were given management training only recently. The curriculum seems appropriate. The result of this training on behavioral change seems promising in a study 6 months after training. Perhaps a second study should be on the operations research agenda two years from now.

5. Access to ORT by under 5s in poverty areas in 1985 is estimated to be 60 per cent. The overall use rate by children with diarrhea (GPO sources of ORS) is said to be 34 per cent. Since many families buy private ORS preparations, this latter figure is an underestimate. In our field trip, we saw ORS packets everywhere, e.g., district hospitals, health centers, and the omnipresent (and successful) village drug cooperatives. We find some limited evidence that, over the whole population, case/fatality ratios from acute diarrhea may be down over the 1978-84 period. There is no evidence for a reduction in diarrheal morbidity, contrary to a recent RPHC Project Quarterly Progress Report.

6. We feel that the cholera reduction targets under this Project are unrealistic and misleading. The biology of cholera is complex and poorly understood. It is known that cases fluctuate dramatically from year to year under "normal" circumstances. A downward swing following the initiation of Project activity would have as little meaning as an upward surge of cases. Sentinel surveillance under this project was reduced greatly from the original 1983 plan, and is unlikely to effect any change in cholera incidence in the short-term.

7. While we were unable to form a reliable, overall impression of the sanitation revolving funds (USAID support began only in 1984), we saw much activity in many villages, especially the building of large and small rainwater collection jars. Since Phase 2 of the RPHC project began in the 1,000 targetted villages, 1,500 cisterns, 16,000 water jars, 9,000 latrines, and 1,300 filters have been built. We estimate crudely that household availability of safe drinking water and latrine access have increased from 17 to 30 per cent, and 26 to 33 per cent respectively, in the target villages. These are maximal estimates.

Appendix D

FIELD VISITS TAKEN BY TEAM MEMBERS

Date	Province	District	District Hospital	Health Center and Villages
Aug 13	Chonburi	- Ban Bueng	1	1
Aug 14-15	Suphan Buri	- Samchook - Dermbang Nangbuat	- 1	2 1
Aug 19-21	Lampang	- Mae Ta	1	2
Aug 21-22	Kamphaengphet	- Klonglarn	1	2
Aug 26-27	Ubon	- Muang Samsib - Khuang Nai	1 1	2 2
Aug 28-29	Si Sa Ket	- Prang Ku - Khu Khan	1 1	2 2
Sept 1-2	Songkhla	- Jana - Ranode	1 1	1 2
Sept 3-4	Satun	- La Ngu - Kuan Done	1 1	2 1

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