

Learning by Doing: Testing the Supply-Side Hypothesis at USAID

Steven W. Sinding

Mailman School of Public Health
and
School of International and Public Affairs
Columbia University

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Introduction

This is the story of how the U.S. Agency for International Development conceived and implemented its strategy to achieve global fertility reduction – the congressional mandate under which it operated its population program between 1966 and 1995. The approach was controversial from the outset. Yet, it was bold, straightforward, and transparent – remarkable attributes in a large political and bureaucratic institution. In the paper, I will endeavor to show how feedback mechanisms, between headquarters and “the field,” and between the agency and external actors, helped to shape the program as time went on. In so doing, I hope to convey lessons about institutional learning, adaptation, and improvement.

The supply-side hypothesis

The first director of the population program at USAID was a medical epidemiologist named Reimert T. Ravenholt, a graduate of the famed Epidemic Intelligence Service (EIS) of the U.S. Centers for Disease Control and Prevention (CDC). At the time of his appointment he was an associate professor of preventive medicine at the University of Washington Medical School. He had worked previously as director of epidemiology and communicable disease control at the Seattle - King County Health Department and had served as a US Public Health Service epidemiology consultant in Europe. Although widely experienced in communicable disease control programs and research, Dr. Ravenholt had never worked in the developing world.

In 1966, on one of his first overseas visits as the head of USAID’s brand-new Population Branch, Ravenholt spent some time in Indian villages where conversations with local women and clinic workers persuaded him that there was an enormous demand for fertility control on the part of these women that was being satisfied only very poorly, if at all, by existing institutions (personal conversation with R.T. Ravenholt, 15 Nov. 2000). This conviction that there was an enormous unmet need for family planning services (as it later came to be called), was reinforced in many subsequent field trips and became the basis of Ravenholt’s program strategy -- and the controversial hallmark of USAID’s approach for many years to come.¹ It was to some extent supported by surveys of knowledge, attitudes, and practices (KAP) regarding family planning that organizations like the Population Council were carrying out, mainly in Asia, during the 1960s. They also revealed a desire for smaller families and for access

¹ Ravenholt published his strategy in 1968 (“AID’s family planning strategy,” *Science*, CLXIII (Jan. 10, 1969, p. 124).

to the means of fertility control among many of the women who were interviewed.²

As it evolved, Ravenholt's strategy resembled a classic disease control campaign. If, as in the case of illness or infection, one could assume that the relevant population desired unambiguously to be free of the "affliction," then a campaign to control and eventually eradicate the "disease" of unwanted fertility made sense. It is not a caricature to describe Ravenholt's philosophy in this way (Ravenholt himself thus described his views in a personal conversation, 15 Nov. 2000). Furthermore, in the debate within public health between those who believed in a comprehensive and/or primary care approach to improving overall health status (the "integrationists") and those who believed in tightly focused categorical attacks on specific health problems (the "verticalists"), Ravenholt had his feet planted squarely in the latter camp.

Needless to say, the assertion of widespread demand for fertility regulation or family planning was controversial, both within the professional population community and at USAID, as was the campaign approach to eradicating unwanted fertility. Professional demographers, particularly those with backgrounds and training in microeconomics, were highly skeptical about alleged demand for family planning. Leaders in the field, like Kingsley Davis (1967) and Philip Hauser (1969) were openly contemptuous of Ravenholt's "simplistic" approach. Their basic argument – that family size is a function of a complex set of social, economic, and cultural circumstances in which families find themselves, and that strategies to reduce high fertility must take these circumstances into account – actually fell on sympathetic ears at USAID. Most of the development professionals at USAID, and elsewhere, doubted that one could separate high fertility from the conditions of underdevelopment and poverty: high illiteracy, subsistence agriculture, the absence of basic systems of economic security and welfare, high infant and young child mortality, and so on. Indeed, USAID staff outside the population program generally were fully prepared to accept the basic argument of Davis, Richard Easterlin (1975) Gary Becker (1960) and others that high fertility was a rational response to poverty and an effective coping strategy for parents who needed children to provide household and farm labor and economic security in old age.

There were, of course, intellectuals who took a different view. Donald Bogue, Hauser's colleague at the University of Chicago, represented a view among some sociologists that, notwithstanding the household economics arguments that explained high fertility as rational behavior, many women were already convinced, and many others could be convinced, that high fertility was not in their individual best interests (Bogue 1974). Bernard Berelson, president of the Population Council, took a middle position, acknowledging the importance

² Ravenholt was actually highly critical of the KAP surveys because, he said, they failed to ascertain the availability of contraceptives in the households and communities they surveyed. He believed, as we shall see, that it was neither possible nor legitimate to measure demand for family planning in the absence of availability of services and contraceptive supplies. Thus, he believed, KAP surveys underestimated true demand.

of economic and social progress as a basic condition of lowering desired family size, but also joining Bogue in arguing that immediately providing services to women who were motivated to reduce their fertility would yield important demographic results (Berelson, 1969).

There was one other external group of importance: the advocates of controlling population growth and their allies in Congress. This group, led by Gen. William H. Draper, Jr., was predisposed to support Ravenholt's approach because, if it worked, it would produce results relatively quickly (Piotrow, 1973; Donaldson, 1990). Given their concerns about the global "population crisis," they wanted to see quick, decisive, and effective action to reduce birthrates and they were impatient with those who argued that birthrates would only fall in response to broad and general improvements in living standards. Many were willing to suspend disbelief and give Ravenholt and his colleagues a chance to prove they were right. Moreover, they did not believe that improvements in living standards were likely unless population growth could be curbed. Powerful congressional allies like Sen. Daniel Inouye (for whom one of Ravenholt's brothers happened to work) provided Ravenholt the external political support he required to hold his USAID critics at bay (Donaldson, 1990).

In the late 1960s, I think it is fair to say that there was a nearly unanimous acceptance among donor agencies, foundations, and political leaders of the fact of a "population explosion" – and agreement that it was a serious impediment to development. Equally, there was a strong will to deal with this demographic crisis, but there was little agreement and much confusion about how to do so. While Ravenholt offered a startlingly clear and straightforward approach, few in this world of donors and politicians accepted it. Thus, the Ford and Rockefeller Foundations, other bilateral donors like the Swedish International Development Authority (SIDA) and the British Overseas Development Administration (ODA) expressed considerable skepticism about the USAID program approach (Harkavy, 1995). Similar skepticism could be found at the World Health Organization, the World Bank, and before long, at the new UN Fund for Population Activities (UNFPA – today known as the UN Population Fund).

Perhaps the greatest supporters of the supply-side approach were NGOs already active in the international family planning field: the International Planned Parenthood Federation, the Pathfinder Fund, the Planned Parenthood Federation of America, and the Association for Voluntary Sterilization, to name some of the early leaders. These organizations were committed to spreading contraceptive and fertility control services around the world and were convinced that such services, if they did not represent the whole answer to the population explosion, certainly offered an important part of the answer. They were allies in the effort to expand the availability of contraception and became among Ravenholt's and USAID's most important collaborators in implementing the strategy.

Moving the strategy forward

At the outset, Ravenholt found himself essentially without staff or the resources to hire staff. Indeed, so pervasive was the skepticism about the population program – even outright hostility by some within USAID – that there

was little disposition on the part of the powers that be to help get things going. USAID's regional bureaus and field missions were disinclined to cooperate, in part because of the lack of interest by all but a handful of host countries (mostly in Asia) in receiving assistance for population activities, in part because of resentment at this new power center within the Agency.

Equally discouraging was the lack of trained and motivated staff to plan and manage a global population campaign of the sort Ravenholt envisioned. The Agency's existing health staff ranged from moderately supportive to hostile to the new population program, and in any case most had other priorities (e.g., malaria control and eradication, river blindness, schistosomiasis, cholera, the incipient primary health care movement). Faced with the reality of burgeoning resources and an uncooperative institutional environment, Ravenholt did the only two things he could do.

First, he used part of the money to provide training in population studies (mainly public health and, to a lesser extent, demography) to existing USAID staff. Some were highly motivated to get involved in population work; others' jobs had become redundant or their skills were no longer relevant to the Agency's work. Refugees from the moribund Public Safety program and, later, the rapidly contracting Vietnam Bureau, for example, were offered the opportunity to go back to school and train to become USAID population officers. Agreements were struck with public health schools at universities such as North Carolina, Michigan, Pittsburgh, UCLA, Johns Hopkins and Columbia and the demography program at Chicago to train USAID staff for Washington and field assignments. The first generation of USAID population field staff were mid-career officers, many of whom saw the new program as a means of reviving flagging careers. Their loyalty to Ravenholt was exceptional.

Second, Ravenholt dealt with the difficulty of starting up field projects by entering into agreements with many of the existing private and voluntary groups that were already active in the field, in effect by-passing the public sector. While this strategy was a matter of necessity – it was the only way to spend the rapidly increasing funds being annually appropriated by an enthusiastic Congress – it also had the advantage of permitting activities to move forward in political environments where leaders were reluctant to become explicitly involved in population programs. In addition, the intermediary community (they were later called “cooperating agencies”) evolved into an unanticipated source of political support as the organizations receiving these funds became a significant political constituency (this was to be especially important years later when the program came under assault in the administrations of Reagan and Bush the Elder).³ Well over half the Agency's annual spending on population activities flowed through these intermediary organizations, in stark contrast to the USAID norm which was for the lion's share of funds to be programmed by missions directly to developing countries. In this sense, the population program was very different from all other parts of USAID's operations: a central Office of Population was the most important element in the system.

³ It remains to be seen how effective they are in the administration of Bush the Younger.

There was another sense in which the population program was unique. Dr. Ravenholt had a veto power over both bilateral population projects and population staffing of the Agency's field missions. No other sector was so organized. Mission directors, who had virtual autonomy in deciding how to allocate project funds in their countries in all other sectors, had to pass their proposals through Ravenholt's Office of Population before they could be approved. And all appointments of the population officers who developed these projects had to be approved by Ravenholt. Thus, the Agency norm in population became: Do do it Ravenholt's way or don't do it at all.

The view from the field

In the late 1960s and early 1970s, basically only countries in Asia were either already moving or ready to move into large-scale family planning programs. Many heads of state in the region had become convinced that rapid population growth was hindering their countries' development and were implementing family planning programs as the principal means of reducing high fertility. By this period, India and Pakistan had already been engaged in family planning, however unsuccessfully, for many years. Korea and Taiwan had programs well underway and Thailand, Indonesia and the Philippines were in the process of developing large-scale programs. The legendary Sam Keeny, a veritable Johnny Appleseed of contraception, had been at work for several years under the auspices of the Population Council planting and nurturing family planning programs throughout the region. The time was ripe for the sort of major external investment in family planning Ravenholt wanted and had the resources to make. Aided by first generation population officers like Scott Edmonds in Thailand, Jarrett Clinton in Indonesia, Charles Terry in the Philippines, and Dorothy Glenn in Korea, USAID quickly moved to supply large quantities of oral contraceptives and condoms – the contraceptive mainstays of the program in those years.⁴

Also high among Ravenholt's priorities was voluntary sterilization. He believed that permanent methods must be available for the very large proportions of motivated women (in many countries, majorities) who wanted to terminate childbearing altogether. He developed major programs with both the Association for Voluntary Sterilization (AVS, later AVSC, now Engender Health) and the Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO) to train doctors and medical teams and supply them the technologies to rapidly expand laparoscopic sterilization and later minilaparotomy.

The Agency also provided funds for training, information and communications, research, and other program elements that helped build the service delivery capacity of these countries. And the intermediaries were

⁴ Ravenholt much preferred orals to IUDs because the latter required clinical settings and trained staffs for their administration. He felt that the rapid spread of family planning required community distribution and the use of fieldworkers who were not trained health professionals. He was also aware that many women suffered side effects of sufficient severity from IUDs that in some parts of Asia, notably the Indian sub-continent, the method had lost much credibility. He differed strongly with Sheldon Segal, the head of the Biomedical Division of the Population Council, who favored the IUD on the grounds of cost, effectiveness, and ease of user compliance.

supported to work with non-governmental organizations. The results were quite positive and very satisfying to Ravenholt. Within a relatively short time after programs were introduced, they showed significant impact on fertility in each of these countries.

The story in South Asia was somewhat different. There the governments had been engaged in providing family planning services for several years (India since the 1950s, Pakistan since the early 1960s), but with little demonstrable impact on fertility. The programs were shot through with corruption and seemed to be swimming against a strong pronatalist tide. Indeed, in South Asia above all other regions, the view had become quite prevalent among intellectuals and many public officials that family planning would not work – there simply was not sufficient demand for small families (Mamdani, 1972). Various schemes of financial incentives and disincentives, and some calls for outright coercion, were heard with increasing frequency as time passed and family planning programs met with little or no response.

USAID's population officers in the region varied in their responses to these program disappointments. Some blamed poor administration, saying that there was no real evidence that good services would not produce results comparable to those that were being seen in East Asia. Willard Boynton and Robert Grant in Pakistan certainly felt that the government had done a poor job of implementing their family planning programs. Others, such as John Cool and Lenni Kangas in India, while conceding that the Government of India had important administrative deficiencies, also argued that there was a severe demand constraint that required policy and program measures "beyond family planning." On the other hand, Alvin Roseman, a physician, was much closer to Ravenholt in his view that if India ever produced a sound program, the results would be as satisfactory as they were in countries further to the east.

Outside Asia, the picture was much more mixed. In Africa, there were no program successes. Governments were unwilling to adopt population policies or permit public family planning programs, and where services were provided through private and voluntary organizations, the results were extremely weak. Julius "Bud" Prince, who toiled for a lifetime as a health and population officer in Africa, was convinced that the Asian model would not work in Africa. Based on that experience, he felt that the only way to make family planning acceptable was to integrate it with maternal and child health and other primary health care services. Prince's arguments, however, like those of Cool and Kangas, fell largely on deaf ears in the Office of Population. They were regarded as iconoclasts who failed to buy into what had become USAID population program orthodoxy: There was no absence of demand, only weak programs. Indeed, as far as Ravenholt was concerned, if contraceptive use remained low despite considerable expenditure of funds, as was the case in several countries – prime examples at the time were Pakistan and Ecuador – this was prima facie proof of poor implementation and weak leadership.

In Latin America and the Middle East, there were a few vanguard countries like Colombia and Tunisia where a combination of exceptionally strong private groups and/or enlightened political leadership had resulted in high quality

family planning services and declining fertility. But in most countries in both those regions, governments ranged from indifferent to hostile toward family planning and it was much harder to get programs off the ground. William Bair in Colombia was successful in steering support to the IPPF affiliate, Profamilia, which mounted what is perhaps the most effective private national family planning program on record. And in Tunisia, Wilbur Wallace, working with the progressive government of President Bourguiba, had similar success. But surrounding countries such as Egypt, Algeria, and Morocco were much more resistant to change, as were most of Central America and the Caribbean, as well as the aforementioned Ecuador and Peru, and indeed much of the rest of Latin America.

Ravenholt frequently found himself in conflict with USAID field missions. Sometimes the conflict was over whether or not to have a population program, and hence a population officer, in a country. At various points missions in such diverse places as El Salvador, the Dominican Republic, Sri Lanka, and Tanzania refused to establish posts for population officers. Often, Ravenholt was able to work around such resistance by deploying USAID-funded NGO resources in these places. But the requirement that all centrally funded programs receive mission “clearance” enabled the more intransigent missions to keep population activities out.

In other cases, the conflict was over program strategies. While it rarely happened that missions would propose the use of population funds to support measures “beyond family planning,” there were nonetheless cases in which Mission Directors wanted more nuanced approaches than Ravenholt’s full-bore family planning programs. Or they resisted accepting the very large shipments of contraceptives that Ravenholt’s “full supply” strategy (aka “programming for success”) required.⁵ In such cases, population officers often found themselves caught in the middle.

Another important source of conflict was with other donors, particularly the World Bank and, to a lesser extent, UNFPA. Neither of these agencies accepted the supply-side orientation of USAID and both constructed assistance programs that sought to be more balanced in approach. The Bank favored infrastructure lending for multipurpose health centers, one of whose functions would be family planning services. Ravenholt dismissed Bank projects as a waste of resources, complaining that the Bank made no serious effort to deal with either the staffing of these facilities or the provision of contraceptive commodities. He felt that loans were the wrong assistance instrument for population. Furthermore, he believed the Bank’s strength in the population sector lay in policy dialogue -- advocacy of population policies -- not lending operations. He was quite vocal in expressing these views.

⁵ The supply-side strategy depended on adequate supplies of contraceptives and Ravenholt’s staff developed an algorithm for field population officers to use in estimating their annual requirements of pills and condoms. The algorithm was based on numbers of women of reproductive age, current contraceptive use rates, and very optimistic assessments of future use. The estimates thus arrived at were consolidated for annual procurements – one-time purchases in such large volumes that great economies of scale were possible, with correspondingly (and heretofore unheard of) low unit prices.

UNFPA had a preference for data collection and analysis, spending considerable amounts on censuses, surveys, and the staffing of population units in national planning offices. While Ravenholt, himself a scientist, had greater sympathy with data collection and analysis than with bricks and mortar, he felt that UNFPA was spending too much of its money on the peripherals and too little on core (i.e., family planning) activities. He found particularly frustrating the fact that UNFPA had a strong disinclination to purchase and supply contraceptives, especially in countries where USAID could not work.

Relations between USAID and these and other donors⁶ were often strained, producing donor coordination problems in some countries and lack of unified global strategies in the donor community. These differences also may have contributed to the very fractious atmosphere at the Bucharest World Population Conference of 1974 and similar international gatherings.

Lessons learned and applied

In this section, I review a few selected USAID population program initiatives, how they fared, and how they contributed to program learning.

1. Community-Based Distribution and “1,000 household studies”

Central to the Ravenholt hypothesis was the notion that contraceptives had to be available at the household level. He was convinced that there was a direct and powerful correlation between ease of access and likelihood of use.⁷ He tried in numerous settings to prove the thesis, most famously, perhaps, in Matlab Thana, Bangladesh – site of the well known field laboratory of what was then known as the Cholera Research Laboratory (today’s International Centre for Diarrheal Disease Research, Bangladesh). At Matlab, contraceptives were provided at the household level by unskilled and essentially untrained workers. From less than one percent, contraceptive prevalence quickly jumped to 17 percent, but problems with unanticipated side-effects and lack of counseling led to a quick drop back to single digits (Osteria, et al., 1978). Scientists who were running the experiment decided that the quality of services was a major problem and turned to a different type of field worker – older women who were themselves satisfied users of contraceptives and who were trained to help women anticipate side-effects and deal with them. Contraceptive prevalence quickly resumed its upward trajectory and continued to climb as new methods, first condoms, then injectables, were added. Ultimately, the Matlab model was adopted as the Bangladesh national program norm and, after a large-scale sterilization component was added, contraceptive prevalence grew over the next

⁶ Relations were also strained with other bilateral donors, in particular Sweden and the other Nordics, and Canada.

⁷ Indeed, I recall an episode during one of USAID’s periodic worldwide population officer’s meetings when Ravenholt stationed a henchman with a plate of chocolate chip cookies at the conference room exit during a break in the program, and proudly announced that nearly every cookie had been taken by those passing by en route to the rest rooms – proof, he said, that access begets use!

20 years until in the mid-1990s it reached about 50 percent – a level heretofore considered impossible in such a poor country.

The Matlab experience showed that, on a modified basis, the supply-side hypothesis had merit. An important caveat was the importance of well-trained workers and good counseling. But the evidence that there was a strong latent demand – an unmet need – for contraceptive services could no longer be in doubt, even in as resource-constrained and poverty-beset an environment as rural Bangladesh.

I was long a doubter of the pure version of the supply-side hypothesis, being more Berelsonian than Ravenholtian. Indeed, when I was recruited by the Pakistan mission to go there as a junior population officer, Ravenholt was extremely reluctant to let me go. He insisted as a condition of my posting that I initiate a Matlab-like “1,000 household study” in Pakistan to demonstrate the demand for contraception at the community level. When I arrived in late 1975, I asked the codirector of the family planning program, Maqbul Sheikh, if he would agree to the mounting of such a study. Maqbul looked at me contemptuously and said, “We carried out a 100,000 household study in Sialkot District three years ago and have made it the basis of the national ‘contraceptive inundation’ program you [USAID] people have insisted on. Why should we do a 1,000 household study now?” I had no good answer to his question. Indeed, Pakistan purported to represent on a national scale exactly what Ravenholt was calling for – ensuring a superabundant supply of contraceptives and attempting to make them available in every household in the country. Unfortunately, Pakistan committed at the national level the same mistake Bangladesh made at the Matlab experimental level – sending out poorly trained and inappropriate field workers (they were young, unmarried college graduates). This mistake was compounded by a disastrous logistics and supply system and rampant corruption at every administrative level. And Ravenholt could quite legitimately claim that Pakistan never really tested the supply-side hypothesis, so incompetent and incomplete was the implementation of the program plan, despite substantial USAID technical and commodity assistance.

After years of failure in trying to move Pakistan’s public family planning program forward, USAID changed program strategies during the 1980s and decided to work much more aggressively with the private and nongovernmental sectors. The result has been a modest but gratifying growth in contraceptive prevalence, now approaching 25 percent of married women, most of whom receive their supplies via subsidized commercial channels.

The lesson that emerged from these and many other early program experiences was that availability of services and simple access to them are important determinants of both contraceptive use and fertility decline, but only when these services include close attention to quality of care and a capacity to respond effectively to clients’ concerns.

2. Playing with fire: menstrual regulation and Senator Helms

Ravenholt, like most population professionals, believed that significant and sustained fertility decline could not be achieved without the widespread use of

abortion. While he shared the preference for contraception over abortion as means of controlling fertility, evidence from every country that had passed through the fertility transition showed that abortion played a significant role in individual fertility regulation. Therefore, he felt, safe abortion should be available as a recourse in the event of contraceptive failure. The problem was that it was illegal in most countries of the developing world and that it could not be responsibly promoted unless a strong clinical system was in place. In late 1972 and early 1973, however, a new technology became available, thanks to research that the Office of Population had sponsored at the Battelle Memorial Institute. It was called manual vacuum aspiration, an approach that did not require electricity and that offered a safe and effective alternative to dilation and curettage. The simple technology was cheap, easily transportable, required little training, and could be administered in even rudimentary clinical settings. In short, it was an ideal way to introduce abortion into the developing world.

Ravenholt moved with typical boldness and vigor, and prophesied that menstrual regulation, or MR as the technique came to be called, would revolutionize programs throughout the developing world. He went so far as to predict that its use would become widespread, if clandestine, even where abortion remained illegal. He anticipated that private practitioners would be able to make good money providing MR and would be willing to do so in all but the most vigilant settings. USAID bought thousands of MR kits and began distributing them through intermediaries and directly to the field. Training programs were established and the system seemed poised for the introduction of a revolutionary new fertility control technology.

But it was not to be. Anti-abortion activists in the U.S., mobilizing in response to the state-by-state liberalization of abortion laws and the brand new Supreme Court decision in *Roe v. Wade*, learned of the new USAID MR initiative and prevailed on Sen. Jesse Helms of North Carolina to offer an amendment to the Foreign Assistance Act prohibiting the use of U.S. funds for “the promotion or performance of abortion as a method of family planning.” The 1973 Helms Amendment, as it came to be called, has served as an effective prohibition on abortion in USAID programs ever since.

No doubt such a prohibition would have come sooner or later – certainly by the time the Reagan Administration took office in 1981 – but the Helms Amendment was an early sign that international family planning was far more vulnerable to the domestic politics of abortion than were services in this country.

3. The primacy of policy: from PLATO to RAPID

While Ravenholt disputed social science research findings that cast doubt on the assertion of widespread demand for fertility reduction, he did believe that government policy in a country was an important determinant of whether, and how rapidly, services could be established and spread. Accordingly, he was willing to support research that purported to measure and explain the consequences of population growth. Such research was being conducted in the early 1970s by Stephen Enke at GE-TEMPO, a contract research arm of General Electric, among others. In addition, Paul Handler, an economist and early large-

scale computer modeler at the University of Illinois at Urbana-Champaign, had developed a methodology for showing graphically the social and economic consequences of high fertility. Handler's PLATO model enabled one to estimate the impact of different rates of population growth on such variables as the demand for food, health services, and education. In the hands of a skilled presenter, it could be a powerful advocacy tool with government officials in developing countries.

Unfortunately, PLATO ran on a mainframe computer in Illinois and was more or less untransportable. It was possible to set up a remote terminal in the Virginia suburbs of Washington, D.C. where USAID's Office of Population was located, but this was not a setting conducive to reaching large numbers of policymakers. Nonetheless, the technology was powerful and it became a priority of the Office to find ways of making PLATO presentations available to policymakers around the world. The solution lay in the brand new portable micro-computer technologies that were being developed in the late 1970s – today's ubiquitous laptop. A small company called The Futures Group was an early enthusiast for the portable technology and developed programs that permitted the economic-demographic models to be hand carried and run in any part of the world. The new contract that permitted the development and widespread dissemination of this approach was RAPID, which was won by The Futures Group in 1976 and led to widespread dissemination via presentations done by Futures' own John Stover and State Department heavyweights Philander Claxton, Jr. (former Special Assistant to the Secretary of State for Population Matters) and Ambassador Marshall Green. RAPID presentations almost certainly contributed importantly to the spread of antinatalist population policies and new family planning programs that grew swiftly in the late 1970s and early 1980s.

4. A single "pill": stabilizing the oral contraceptive

U.S. Government procurement regulations made it impossible to establish a long-term supply contract with one manufacturer. Thus, each year during the early years of the program different manufacturers would submit the low bid in response to the Agency's annual request for bids to supply oral contraceptives. The result was an ever-changing array of brands that were shipped to family planning programs. The brands, while all similar, did have subtle differences that produced a wide variety of different side-effects. Since one of the most important reasons for discontinuation of use of a contraceptive is side-effects (especially, as we have seen above, when these are unanticipated), the constant switching of brands created chaos in many programs.

Population officers in the field would regularly complain to Washington that a new shipment of orals was producing a rash of new side-effects that, in turn, resulted in high dropout rates. They pleaded for Washington to find a way to end the constant brand switching. In the mid-1970s, the Office of Population responded in two ways. First, Ravenholt had long cherished the idea of a distinctive brand identity for public sector oral contraceptives. The demand from the field for uniformity enabled him to press forward with the proposal for a single

image – the now familiar “Blue Lady” packaging of publicly provided orals. He persuaded other donors, most notably UNFPA, to apply the same standard, and together the donors were able to ensure that all orals delivered under their contracts would bear the same Blue Lady logo.

The second, and ultimately more important, response to the demand for uniformity and continuity in oral contraceptive brands was the decision to write the specifications so tightly that, no matter who won the contract, the product would be essentially identical. The specs were written on the basis of years of program research that revealed the formulations that had the highest combination of efficacy and acceptability to women in developing countries. Originally Syntex, and later Wyeth Ayerst, were able to respond to bid requests containing those specifications and have provided contraceptives to the program for many years since. Variability diminished enormously and oral contraceptive programs became, for the first time, really stable because the product did not change.

5. Logistics: the missing link in the supply chain

The Pakistan program was perhaps emblematic of a chronic deficiency in family planning programs in developing countries: poor logistics management. Central warehousing, supply lines and the timely resupply of contraceptives, record-keeping, and security against “leakage” of product to the black market were all major problem areas in many programs.

While logistics management worked well in some countries, particularly in East and Southeast Asia, Washington heard numerous tales of program contraceptives that found their way across borders into countries where no USAID assistance was being provided.⁸ Clinics would experience stockouts even when central warehouses had adequate supplies. Sometimes central warehouses were, indeed, overflowing with contraceptives while shelves on medical cabinets in facilities at the program periphery were bare. Central warehouse staff were often unaware of what stocks they held and had no inventory systems in place. New contraceptives would be shipped out before older stocks were exhausted, resulting in many cases of out-of-date commodities which then had to be destroyed.

While the “programming for success” mentality was undoubtedly responsible for a certain amount of irrational exuberance resulting in excessive amounts of contraceptives being delivered to countries, lack of experience in many developing country health ministries in managing large quantities of commodities further contributed to the supply problems. And, other than unexpected side-effects, nothing will kill an incipient family planning program faster than the inability of clients to get contraceptives when they need them.

The cry for help from the field led the Office of Population by the late 1980s to turn its attention to solving the persistent logistics management

⁸ While some missions worried about these losses of USAID-provided contraceptives, Ravenholt had no problem with cross-border smuggling, reasoning that in most cases the contraceptives were finding their way to consumers in neighboring developing countries where USAID assistance might not be available (e.g., India and Burma in the 1970s, when no USAID program was operating in either country).

problem. Having essentially solved the problem of unpredictable changes in oral contraceptive properties, it remained to ensure that the now predictable and acceptable product was also reliably available to clients. Accordingly, the Office designed a logistics management assistance project, the contract for which was won by the firm of John Snow International, which for the past 15 years has helped family planning and reproductive health programs in developing countries design and implement effect systems for ensuring accurate estimates of contraceptive needs, timely delivery of product, clean and dry central warehousing, good inventory control, good communications between the center and peripheral outlets, and timely shipments to ensure adequate stocks on hand in clinics and communities.

Demonstrating impact: WFS, CPS and DHS

Perhaps it was because of its high visibility, in part the consequence of special congressional earmarks that made it distinctive from other elements of the foreign assistance program. Perhaps it was the fact that its first director was an epidemiologist. For whatever reason, the population program was from its very early days exceptionally sensitive to the need to document progress in achieving its objectives – more so than any other part of the USAID program, at least until the 1990s. Statistical systems in developing countries were at best rudimentary and, for the most part, inadequate to the task of tracking demographic change over relatively short periods of time.

The gold standard in demographic data collection and analysis has always been censuses and vital registration systems, and in the early years Office of Population demographers tried to devise projects to strengthen developing country census and vital registration systems to measure changes in fertility and family size. It soon became apparent a) that such systems were too expensive and time consuming to serve a useful evaluative purpose in the short term, and b) that they could not readily provide information on such critical intermediate variables as contraceptive use rates.

Another approach, program statistics, was deemed useful for monitoring implementation but unreliable for assessing impact because of in-built biases where providers are collecting the data that measure their own impact. Using whatever data were available from vital registration systems, Ravenholt, with the assistance of the head of his demographic unit, James Brackett and demographer John Chao, constructed time series of age-specific fertility estimates by country – curves that resembled gradually diminishing haystacks over time. But few people had confidence in the data on which these estimates were based and even fewer believed that whatever changes were observed could be attributed to family planning programs.

Ravenholt was aware that the United States had been conducting quinquennial surveys of fertility for some time. In June 1971, after a meeting with his boss to discuss preliminary ideas for the fiscal 1972 budget, Ravenholt was struck by the idea of creating a World Fertility Survey. He proposed setting aside \$2.0 million in the FY72 budget for preliminary work on this idea. On an air

shuttle flight from New York to Washington about three weeks later he sounded out Charles Westoff, a Princeton professor who had considerable experience with the U.S. surveys and who, at the time, was staff director of John D. Rockefeller's Presidential Commission on Population Growth and the American Future. Westoff thought the idea was grandiose but interesting, and encouraged Ravenholt to develop it further.⁹

By now, Ravenholt was galvanized by the idea of a World Fertility Survey. He assigned the task of developing the project to a sociologist in the Research Division of the Office of Population, J. Timothy Sprehe. Ravenholt and Sprehe agreed that such a project would be more credible and would be seen to be more legitimate if it had the support of donors in addition to USAID, most particularly the United Nations. In discussions with UNFPA, which was enthusiastic about such an undertaking, it became clear that the program would have greater credibility if it were based outside the United States. And as long as there was international sponsorship, strict "buy American" procurement rules could be waived. Sprehe and his project design colleagues at UNFPA then looked for an appropriate base of operations for the World Fertility Survey. The International Statistical Institute, which was based in The Hague, was willing to serve as the home base for the project, and it suggested that the renowned British statistician, Sir Maurice Kendall, head up the enterprise. Kendall was willing, so long as the WFS was based in London, and so it came about that USAID and UNFPA co-sponsored the World Fertility, run by Kendall from offices in London.

UNFPA and USAID agreed that there should be an international advisory committee to oversee the construction of the all-important core questionnaire and to advise on other important methodological issues. An advisory group of some of the world's leading demographers was formed and a staff of younger, future superstars in the demographic field, was assembled. Ravenholt tried valiantly, but ultimately unsuccessfully, to keep the core questionnaire to one page. He was convinced that the simplest, most basic possible set of questions was optimal, preoccupied as he was with measuring program impact. But he was unable to prevail over the objections of the advisory group and UN staff, who viewed the WFS as an opportunity to learn a great deal more about fertility and its determinants – indeed, to more deeply explore theories of demographic change.

The WFS was an enormous success. It provided new data on a host of developing countries – eventually surveys were carried out in over 40 – where very little was known about demographic processes, and it contributed mightily to the global understanding of population dynamics. The WFS became the basis of the first nearly universally accepted conclusions about fertility decline and the contribution of family planning programs thereto. It was, in short, an historic breakthrough in showing that surveys could be used to produce reliable estimates of fertility change, fertility aspirations, contraceptive use, and the social and economic correlates and determinants of all of these.

⁹ Westoff remembers the story a bit differently. He thought he had planted the seed of the idea for a WFS in Ravenholt's mind during that shuttle flight, but Ravenholt says he purposely sought out Westoff and did not reveal his plans in that original conversation.

Unfortunately, after 10 years of support, and at a time when its own resources were severely stretched, UNFPA decided to withdraw its support from the World Fertility Survey. USAID was unable to find other international partners and thus the WFS was wound down. In 1975 a contract had been given to Westinghouse Health Systems for a project called Contraceptive Prevalence Studies. CPS was, as the name implies, less concerned with fertility and its determinants than with changes in contraceptive use, and with program variables most closely associated with it. Ravenholt and Brackett developed it because they felt WFS did not provide sufficient data on contraceptive availability -- always a bone of contention between the Office of Population and the WFS demographers and advisers. While useful to program managers and administrators, and capable of answering the most basic questions about the impact of USAID assistance, CPS otherwise lacked much of the richness of the WFS, as well as its credibility as an internationally recognized scientific instrument.

In 1983, as WFS was nearing its end, USAID decided to combine the simplicity of CPS with the greater elegance and depth of WFS in a new project called Demographic and Health Surveys. Westinghouse Health Systems again was the successful bidder for DHS (it was subsequently bought by Macro International, the present contractor). A prestigious international group was formed to advise on questionnaire design and analysis protocols and a strong technical staff was hired to implement the project. DHS, now in its 18th year, has clearly stood the test of time. It is the recognized survey standard for measuring demographic change (especially fertility), estimating unmet need, and assessing the determinants of demographic change, including the impact of direct program interventions. DHS was explicitly designed to broaden the WFS model to include health variables and, in this sense, anticipated the shift toward the reproductive health approach that was to arrive with full force a decade later at Cairo's International Conference on Population and Development.

Conclusion

USAID's population program emerged during a period of great uncertainty about how to structure policies and programs that would successfully reduce fertility. Its approach was simple, direct, and bold – some thought foolhardy: establish a global system of contraceptive services and supplies to meet the current and anticipated demand for fertility control. Many – probably most – professionals in the population field questioned the wisdom of USAID's supply-side approach and few other donors or developing country governments subscribed to the USAID view.

In this paper I have tried to show how the approach was implemented, particularly how interaction between headquarters and the field refined and modified the approach. It is fair to say that, while the program grew in sophistication over time, the basic commitment to provide access, information, and quality services to a population that was first assumed and later known to be

ready to adopt modern fertility control practices remained constant over time. Today, most objective analysts agree that Ravenholt and his band were more right than wrong – that demand for contraceptive services both existed and could be created, and that a relatively straightforward family planning approach was a necessary, if not in all places sufficient, condition for rapid fertility decline. Less certain but clearly plausible is the proposition that fertility decline in the developing world might have begun somewhat later and probably would have proceeded a good deal more slowly had USAID not made the massive investment it did in expanding contraceptive services.

In retrospect, it is unfortunate that Dr. Ravenholt and his more enthusiastic followers adopted so highly aggressive a posture and were so dismissive of those who questioned their approach. The effect was to polarize the field and to create a resistance in many quarters that remains to this day. It would have been quite reasonable to assert, as many did in the late 1960s, that family planning services are an essential condition of fertility decline and even that their provision and expansion should be the first order of business in population policy. It was not reasonable to imply, as Ravenholt often did, that family planning was the only thing that needed to be done, or that measures “beyond family planning” were distracting and counterproductive.

Thus the legacy of this largest of all international assistance efforts in the population field is mixed, but on the whole positive. USAID challenged conventional wisdom and offended a great many people in the process. It had a polarizing influence on the population field, contributing to a backlash among developing countries at the World Population Conference in Bucharest in 1974 and within the U.S. Government itself at the International Conference on Population in Mexico City in 1984. But its great assets – clarity of purpose, simplicity of design, and consistency over time – also produced the greatest impact of all international efforts to address the population explosion.

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