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Effectiveness of Public and Private Extension Advisory Services Regarding the Human Resource Practices: A Case Study of Balochistan, Pakistan.

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Abstract:
Present research set out the public and private agricultural extension services with the term of human resources practices. Five districts, one from each ecological zone, were taken purposively: namely Kech, Lasbela, Kalat, Killa Saifullah and Sibi. A sample of (250) farmers and (100) public and private Extension Field Staff (EFS) was taken as sample size by using the multi-stage random sampling technique. Null hypothesis was also tested in order to know the variances in the perceptions of the respondents. The results revealed that majority (88.5 percent) of the farmers did not receive any farm visits from public EFS. Majority (87.7 percent) of the farmers receive regular visit by private EFS. Farmer's ranked field day and seminar 1st and 2nd respectively. Overwhelming majority of the farmers received result demonstration methods (68. 92 percent) by private EFS, which were ranked first. While private EFS provided the HRD practices (70.6 percent). Private extension services have extra strength against to public extension, while public extension services have more flaws as weaknesses and are facing problems in technology transfer process. The study recommended that public EEFS should visit the farmer's farm and home regularly. Result demonstration and campaign should be organized at union council level as these methods were perceived effective. Private extension services should use holistic tactic plus contact those farmers who have small land holding size.

Key words: *human resource, public extension, private extension, Balochistan, Pakistan.*

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1. Introduction

Agricultural extension is an effective vehicle to disseminate technical information of new crop technologies in order to raise the living standard and socio-economic circumstances of the rural masses that diminish the occurrence of poverty. The purpose of agricultural extension services is to serve as a vehicle for fostering change in agricultural and rural development in delivering useful information to farmers and enhancing mandatory knowledge and skill (Shafique, 2008).

The focus of agricultural extension work is to increase agricultural production and spread the benefits of improved farming techniques more widely (Picciotto and Anderson, 1997). According to Nagel (1997), in many developing countries the transfer of technology model has been prevalent practice for developing and spreading innovations. Chambers (1993) defines the transfer of technology model as the basic paradigm of agricultural research and extension with priorities as decided by scientists and funding agencies, and new technologies are developed on research stations and in laboratories and then handed over to extension agencies to be transferred to farmers. Proper technology transfer and adoption thereby can reduce the yield gaps (Jalvi, 1996; Khan, 1997; Hanif *et al.,* 2004).

There is growing curiosity rising in developing countries to re-orient agricultural extension system (Rogar, 2004). In global context, the agricultural services are facing new challenges regarding heavy demand for food; declining cultivated area and fiscal constraints in the public sector. International organizations and donor agencies have suggested the Governments of developing countries to reform and modify their existing public sector structures with purpose-specific and need-specific approach (Umali and Schwartz, 1994; Rivera, 2001). Due to ineffective performance of public extension system, the paradigm shifts towards privatization throughout the world (Marsh and Pannel, 1997; Saravanan & Gowda, 2001; Rivera, 2004; Kumar & Reddy, 2006; Ajieh, *et al*., 2008; Ali, 2009). A private agricultural extension service seems to be need-oriented and quality service provider (Bos, 1991). Mostly the public extension systems are undergoing rapid changes. The shifting of public agricultural extension ambiance reflects an all-inclusive tendency towards privatization (Johnson *et al.,* 1989; Rivera & Gustafson, 1991; Dancey, 1993).

In global prospect, public agricultural extension services are facing new challenges of financial crisis (Pray and Umali-Deninger, 1998; Pardey & Beintema, 2001; World Bank, 2004). The decentralization, privatization and demand-driven approaches are being promoted. In this regard, the existing agriculture extension systems need to be redesigned in order to accelerate theme of horizontal and vertical expansion in public sector services, which are responsive to farmer's needs.

In Pakistan, numbers of public extension approaches and models have been tried and discarded based on the traditional linear approach. Mostly multi-sectoral extension programs were focused the rural and community development. The Village Agriculture Industrial Development Program (V-AID) was first formal attempt for the rural development in Pakistan, and designed to solve rural problems through the mobilization of the Government resources with involvement of the rural community (Mallah, 1993). The Integrated Rural Development Program (IRDP), People's Works Program (PWP), Inputs at Farmers' Door steps Approach, Training and Visit system (T&V) and Farmer

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Field School (FFS) were major agricultural extension and community development programs introduced in Pakistan (Davidson *et al.,* 2001; Saima *et al.,* 2005; Abbas *et al.,* 2009). Largely the goals of entire multi-sectoral programs were the enrichment of material and social welfare of rural masses (Mallah, 1993; World Bank, 2003). Nearly all were doomed owing to bureaucratic snag, insufficient support services and fragile institutional relationships (Röling, & De Jong, 1998; Davidson *et al.,* 2001; Williamson, 2002; World Bank, 2003; Lodhi*et al.,* 2006; Shafique, 2008; Abbas *et al.,* 2009; Haq, 2009). To address these issues, the international organizations and agencies have counseled to Government of Pakistan for major structural changes and yardstick institutional reforms in existing agricultural extension setup in order to facilitate and strengthen the agricultural extension services appropriate and efficient means (Rivera, 2001; Khan, 2006; Ali, 2009).

Government of Pakistan is looking for a suitable alternative extension system, which is responsive to grower's needs and is cost-effective, sustainable, and environmentally safe (Davidson *et al.,* 2001). The public sector has also replaced the existing supply-oriented delivery structure with demand-oriented system in order to ensure the dynamic participation of local communities in to the decision making process. It also propagates new technologies among the farming communities through the most effective manner in order to promote the participatory approach. It is therefore dire need of the time that agriculture extension services are designed in new prototype with the light of rural socio-economic characteristics of growers, accessible qualified and skilled human resources (Khushk & Memon, 2004; Khan, 2006; Mengal *et al.,* 2014).

2. Problem statement

Review indicated that the provincial agricultural research system having of lack adequate trained personnel and financial resources (GoB & IUCN, 2000). On the other hand, Agriculture Extension Wing (EFS) did not carry out to performed agricultural extension activities due to lack of operational funds and poor capacity building of extension staff (Mengal *et al.,* 2012; Mengal *et al.,* 2015). The extension agents mostly have a large area of jurisdiction and focus on a small number of large substantial farmers, consequently overlooking the needs of small and medium-sized farmers. In this regard, the HRD practices did not disseminate on proper ways (Ahmad, 2007; Mulyanto and Magsi, 2014.).

3. Objectives

i- To study the public and private agricultural extension services regarding; Farm visits; Extension teaching methods; Human resource practices.

ii- To develop recommendations for the future strategy for both productive sectors.

4. Hypothesis

The following null hypothesis was tested in this research:

H_O1 There is no significant difference in the perception of farmers regarding human resource practices as used by public and private extension field staff.

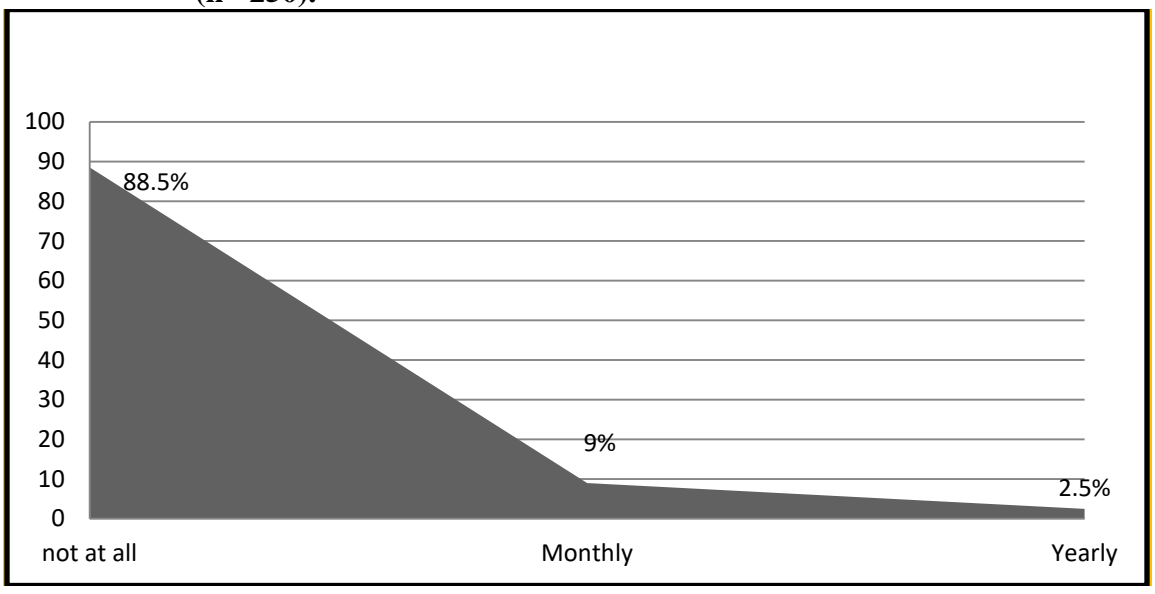
5. Methodology

Research design is the comprehensive plan of an investigation about detailed procedure (Ray & Sagar, 1999). Descriptive research survey was used in present investigation, because of descriptive survey gain a better understanding of different aspects (Trochim, 2000; Jonassen, 2001). The target population for present study was consisted of farmers and both public/ private extension field staff of the five purposively selected districts of Balochistan province namely Kech, Lasbela, Kalat, Killa Saifullah and Sibi of Balochistan province. A sample of (250) farmers and (100) EFS were selected by using the multi-stage random sampling technique. A 1-5 Likert type scale was used to measure the responses on the individual statement (Trochim & William, 2006). Detailed questionnaire was developed keeping in view the objectives of the study. The data collected by the researcher was tabulated and analyzed by applying quantitative approaches and standard statistical techniques. SPSS (PC) program was used to analysis the data (Boone *et al*., 2002; Davis *et al*., 2004). Analysis of data was carried out by using weighted score means score, standard deviation and rank orders (Eck and Torres, 1996). The rank order, mean efficient score, standard deviation (SD) was calculated to know the perception of farmers and extension field staff of both sectors. In this connection, the rank orders were assigned to all the categories based on the mean scores. (Lodhi, 2003) used the category with highest mean scores as the first and lowest mean scores as the last rank the same procedure.

6. Results and discussions

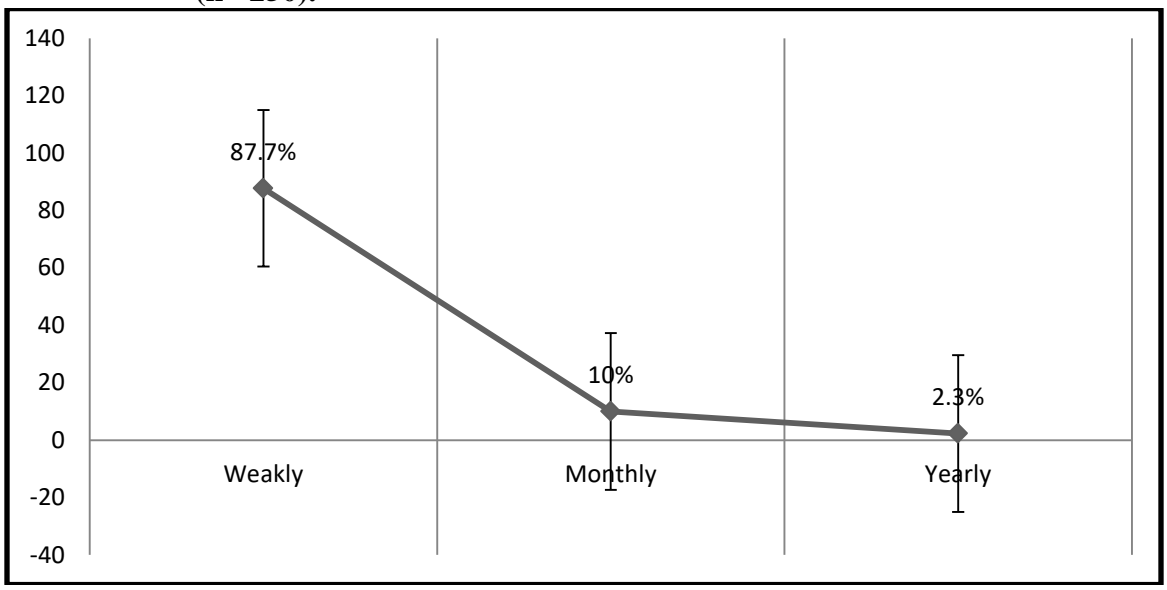
The data regarding frequency of visits paid by the public extension field staff as shown in figure-1.

Figure No.1. Farmers perception regarding frequency of visits paid by public EFS (n= 250).



The results revealed that majority (88.5 percent) of the farmers did not receive any farm visits from public EFS followed by (9 percent) of farmers were of the view that they received monthly visits. Most (2.5 percent) of farmers were of the opinion that public extension field staff did not visit to their farms either at all or yearly basis.

Figure No.2. Farmers perception regarding frequency of visits paid by private EFS (n= 250).



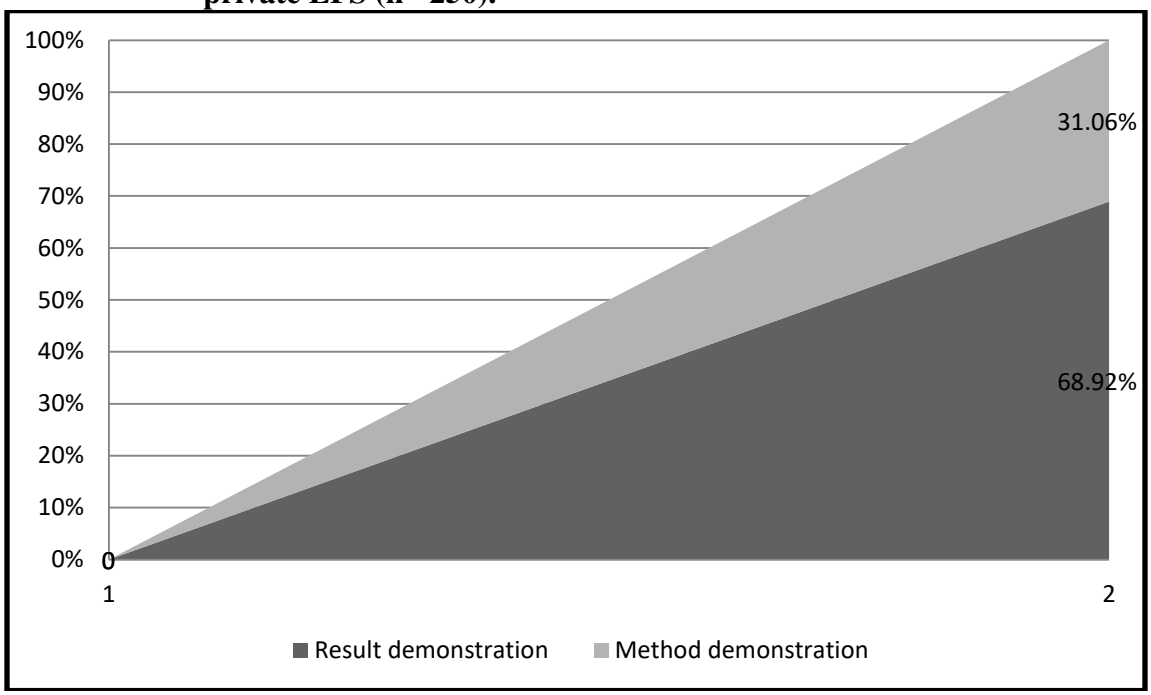
Private extension field staff also uses a variety of methods to contact farmers. Farmers were asked to provide their perception regarding frequency of visits paid to them by private EFS in their field. The data are presented in figure-2. Which show that most (87.7 percent) of the farmers received visit by private EFS on weekly basis. Whereas only (10-2.3 percent) of farmers were of the view that private extension field staff visits to their farm on monthly and yearly bases respectively.

Table No.1. Relative ranking of variables as perceived by farmers (n= 250).

Variables	Weighted Score	Ranked Order	Mean	SD
Conduct field/farm visit regularly	1270	1st	4.09	0.79
Arranging seminar	1259	2nd	4.07	0.86
Conduct group discussion regularly	1220	3rd	3.93	1.01
Conduct field trips regularly	1190	4th	3.83	1.11
Literature distribution	1156	5th	3.72	1.19
Conduct method demonstration regularly	1126	6th	3.63	1.25
Conduct result demonstration regularly	1099	7th	3.54	1.29
Arranging exhibition	1041	8th	3.35	1.38
Conduct campaign	899	9th	2.90	1.42
Conduct FFS regularly	820	10th	2.64	1.38
Conduct home visit regularly	700	11th	2.25	1.20
Conduct farmer fair (melaa)	629	12th	2.02	1.03

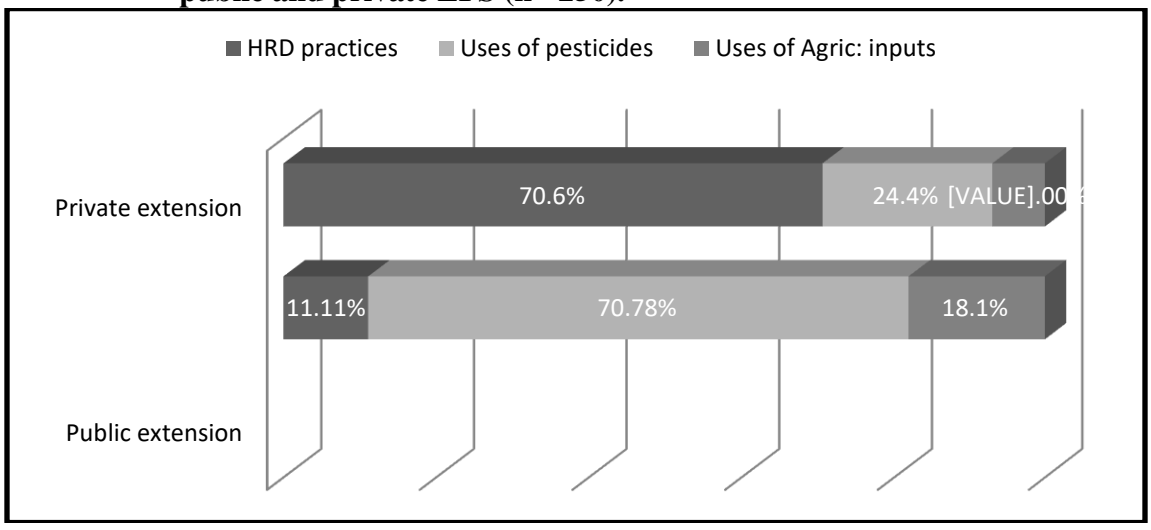
Farmers were asked to give their perception about the extension teaching methods and their effectiveness as used by both public and private EFS. Table-1 depicts the responses of farmers. Based upon the mean score for each extension teaching methods, rank order was given. Field days (4.09) and seminar (4.07) were ranked first and second respectively whereas farmer fair (2.02) was at the bottom of the ranking.

Figure No.3 Farmers perception regarding extension teaching methods as used by private EFS (n= 250).



The important aspect of the study was to explore the extension teaching methods as used by private extension field staff as these methods were considered as an important aspect of technology transfer and trust building. The result in figure-3 shows that 68.92 percent of the farmers received result demonstration by private extension field staff at greater an extent. Only (31.5 percent) of the farmers received method demonstration by private extension field staff at somewhat extent.

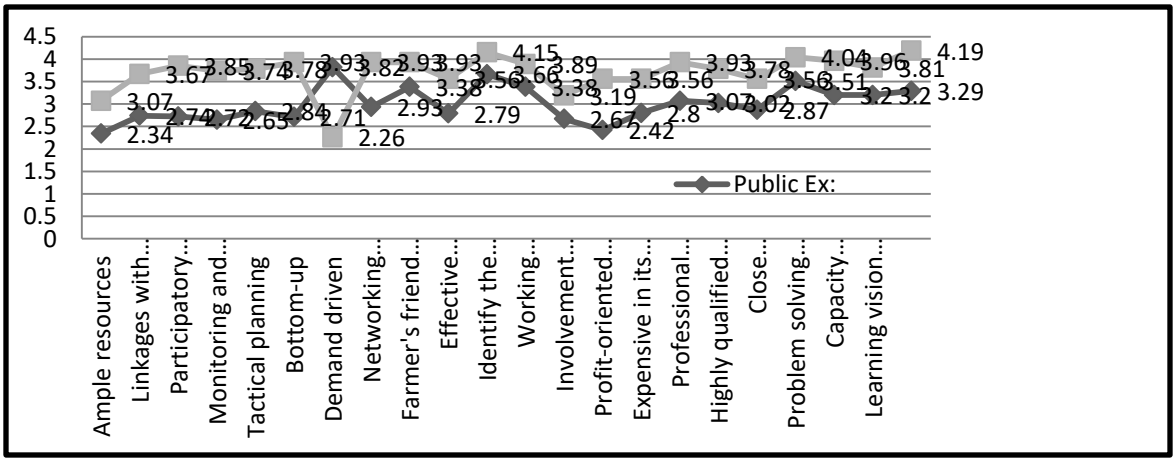
Figure No.4 Farmers perception regarding diverse agricultural items as used by public and private EFS (n= 250).



Extension field staff also uses a variety of methods to contact farmers. Farmers were asked to provide their perception regarding diverse agricultural items as used by public and private EFS. The data are presented in figure-4. Which show that majority (70.06 percent) of the farmers were of the view that private extension field staff used the HRD practices at a greater extent. Whereas 24.4 percent of farmers were of the view that private extension field staff used the HRD practices to somewhat extent. On the others hand, (70.78 percent) of farmers were of the opinion, that public extension used the pesticides. Only (18.01 percent) of the farmers reported that they public extension were used the agriculture inputs.

Mostly communication gap between extension field staff and farmers was the tangible dilemma as identified. The mobile phones connect much easier and growing steadfast manner as compared to other mean of communication. Through utilizing this service, growers gain knowledge to advance their farming skills and techniques that help them improve productivity thought the information as well as getting valuable agricultural information and maximum benefits from mobile phone usage. Increasing uses of mobile services in Punjab province for extension services witness a high rate of contact (PTA, 2011). This experience can better be utilized in Balochistan since the population in Balochistan is scattered and a large area can be effectively covered.

Figure No.5 Extension field staff perception regarding HRD practices (n= 100).



In extension education professional human resource practices aspect of extension filed staff plays an important role to teaching farmers and disseminating technology at gross root level as shown in figure-5. Extensions working in public as well as private extension significantly highly attitude towards their clients. In this regard, a comparison was made between the perception of public and private EFS regarding competency level. Significant differences were observed 8 out of 22 categories. Farmers were gives least priority to public EFS regarding human resource practices as compared to private extension. The hypothesis that:

H_O1 There is no significant difference in the perception of farmers regarding human resource practices as used by public and private extension field staff.

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Therefore, the null hypothesis 01 was rejected in favor of alternate hypothesis. Hence, it was concluded that differences existed between the perception of public and private extension field staff regarding human resource practices in agriculture extension system at 0.05 alpha level. Private extension services have more strength regarding the human resource practices as compared to public extension. However, public extension services have more weakness regarding the human resource practices as compared to private extension. Growers gave excessive preferences to private EFS against public EFS about HR practices, core competency level (knowledge, skills, & behaviors) and extension teaching methods.

7. Conclusion and recommendations

Majority (88.5 percent) of the farmers did not receive any farm visits from public EFS followed by (9 percent) of farmers were of the view that they received monthly visits. Most (87.7 percent) of the farmers received visit by private EFS on weekly basis. Field days (4.09) and seminar (4.07) were ranked first and second respectively whereas farmer fair (2.02) was at the bottom of the ranking. More than half 68.92 percent of the farmers received result demonstration by private extension field staff at greater an extent. Majority (70.06 percent) of the farmers were of the view that private extension field staff used the HRD practices at a greater extent. On the others hand, (74.78 percent) of farmers was of the opinion, public extension used the pesticides. However, significant differences were observed 8 out of 22 categories regarding HRD practices. Based on achieved results following recommendation put forward: The study recommended that public EEFS should visit the farmer's farm and home regularly. Result demonstration and campaign should be organized at union council level, as these methods were perceived effective. Private extension services should use holistic tactic and contact those farmers who have small land holdings. It was also recommended that the in-service trainings should be arranged to upsurge the working productivity and capacity building of EFS. Further, it was recommended that financial incentive of public EFS could be increased and large area of jurisdiction for EFS should be minimized.

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