

(GXFDWLRQ

3K' 8QLYHUVLW\ R&R60XWKH)OR\$ULVD 6FLHQFHV &RPPXQ
ODMRU \$WLFHIXFDXUD 6WXGLHV
OLQRU \$UHGLD 7HFKQRORJ\ 6WXGLHV *HQQHU 6H[
\$GYL\$RUKD 'XUKDP 3K '
&RPPLWWHH %LDQD 3KRQ -RVH \$Q3KH 0DOGRQDGR
5DFKHO ('XEUR6\UNDFXKH' 8QLYHUVLW\

0\$ 8QLYHUVLW\ R&R60XWKH)OR\$ULVD PPP&QLFDWLRQ

0\$ 8QLYHUVLW\ R&R60XWKH)OR\$ULVD PPP&QLFDWLRQ)LOP
OLQRUV +&VLRPD 6WXGLHV

0\$ 8QLYHUVLW\ R&R60XWKH)OR\$ULVD PPP&QLFDWLRQ)LOP
OLQRUV +&VLRPD 6WXGLHV

3URIHVVLVRQDO 3RVLWLRQV

*UDGXDWH 7HDFKLQJ \$VVRFLDWH 'HSDUWPHQW RI &RPPXQ
SUHVHQW

*UDGXDWH \$VVLVWDQ\ &RPPXQ QLFDWLRQ QLQHHULQJ 8Q
6RXWK)OR\$ULVDHQW

*UDGXDWH 5RFDWLRQ \$WPHQW RI &RPPXQLFDWLRQ 8QLYHUVLW\

5X3 QXOUDJ 3DFHU
\$XWKHQWFLW\ DQG &RPPXQ QLFDWLRQ QLQHHULQJ &ULW
KWWSV GRL RUJ FFF WFDH

3 UHV1/GHDQW HUVKLS)HOORZ 2IILFH RI 6WXGHQW /HDGHUV
7KH 8QLYHUVLW\ RI 7DPSD

* UDQWV

5HFLSLHQW 1DWLRQDO &RPPXQLFDWLRQ \$VVRFLDWLRQ 6

5HFLSLHQW 8QLYHUVLW\ RI 6RXWK)ORULGD 6WXGHQW *I
6SULQJ)DOO)DOO

7HDFKLQJ

8QLYHUVLW\ RI 6RXWK)ORULGD &RPPXQLFDWLRQ

, QVWUXFWRU RI 5HFRUG
3XEOLF QJSHDNL

*UDGXDWH 7HDFKLQJ \$VVLVWDQ
, QWURGXFWRQ WR &RPPXQLFDWLRQ
&RPPXQLFDWLRQ &XOWUDO 'LYHUVLW\

8QLYHUVLW\ RI 6RXWK)ORULGD LQHHULQJ

*UDGXDWH , QVWUXFWLRQDO \$VVLVWDQW
*OREDOLJDWLRQ 7HFKQRORJ\
(QJLQHHULQJ (FRQRPLFV ZLWK 6RFLDO DQG *OREDOLJ
\$VVLVWV ZLWK , QWHUFXOW & RPPXQLFDWLRQ & RPPXQLFDWLRQ

, QYLWHG 7DONV

\$VLNpRRD 6R W -XVW 'RRUHQV \$VVRFLDWLRQ HWK \$OLVKD / 0HQJL
&ZLWK ž• &à 0 \$y.° 0P €`HQW dHDLGVY. •\$T 'à @%À iK pVK 3*O À.i D

:LOO4UG

3DSHU SDUW RID F&RPFSSHVQWLDQG SDFQHOO L]LQJ 0RUDOLWV
%ODFN :RPHQ RUDLWFRUDQG 5HDOLW\ 79 DIWHLW5DFDLOO
DQG &XOWXUDO 6WXG&RHP'XLFLDWRQDSWVRQDDWLRQ F

: LOODUG

6:\$ 1\$ 0LGGOH (DVW ~~RD&F~~ ~~FXWBR~~ ~~QDO~~ &RPPXQLFDWLRQ
\$VVRFLDWLRQ FRQYHQWLRQ 1HZ 2UOHDQV /RXLVLDQD

3DS ~~DUQHO~~ &KDLU 6HMLV ~~FRQD~~ ~~ZUL~~ ~~QJQ~~ ~~4X~~ ~~HHU~~ ~~QH~~ ~~5DG~~ ~~4R~~ ~~DU~~ 7K
3RWHQWLDO IRU 0DNLQJ 6HQVH RI WKH 3DVW &ULWLT
)XWX ~~8~~ ~~FD~~ ~~W~~ ~~LD~~ ~~D~~ ~~Q~~ ~~G~~ &XOWXUD ~~8~~ ~~D~~ ~~X~~ ~~F~~ ~~X~~ ~~G~~ ~~L~~ ~~R~~ ~~Q~~ &RQLV ~~H~~ ~~D~~ ~~R~~ ~~Q~~ ~~D~~ ~~O~~
&RPPXQLFDWLRQ \$VVRFLDWLRQ ~~DR~~ ~~Q~~ ~~Y~~ ~~D~~ ~~Q~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ 1DWLRQ

3DQHO 'L & ~~R~~ ~~K~~ ~~D~~ ~~L~~ ~~R~~ ~~Q~~ 6HVVLRQ ~~F~~ ~~D~~ ~~L~~ ~~D~~ ~~Q~~ ~~Z~~ ~~Q~~ ~~J~~ ~~W~~ ~~K~~ \$ ~~F~~ ~~R~~ ~~L~~ ~~&~~ ~~K~~ ~~D~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ ~~J~~
6WXGHQW 3H ~~S~~ ~~F~~ ~~W~~ ~~S~~ ~~L~~ ~~E~~ ~~M~~ ~~O~~ ~~R~~ ~~E~~ ~~F~~ ~~L~~ ~~H~~ ~~D~~ ~~O~~ -XVWLFH 'LYLVLRQ 1DWLRQ
\$VVRFLDWLRQ FRQYHQWLRQ ~~D~~ ~~Q~~ ~~G~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ ~~D~~ ~~O~~ +DUERU 0

3DQHO 'L & ~~R~~ ~~K~~ ~~D~~ ~~L~~ ~~R~~ ~~Q~~ 6HVVLRQ ~~F~~ ~~D~~ ~~L~~ ~~D~~ ~~Q~~ ~~Z~~ ~~Q~~ ~~J~~ ~~W~~ ~~K~~ \$ ~~F~~ ~~R~~ ~~L~~ ~~&~~ ~~K~~ ~~D~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ ~~J~~
3HGDJRJLHV LQ W ~~R~~ ~~N~~ ~~H~~ ~~L~~ ~~P~~ ~~M~~ ~~L~~ ~~R~~ ~~J~~ \$ ~~Q~~ ~~G~~ ~~L~~ ~~5~~ ~~H~~ ~~V~~ ~~L~~ ~~V~~ ~~W~~ ~~L~~ ~~Q~~ ~~J~~ LQ WKH
6FKROD ~~O~~ ~~7~~ ~~H~~ ~~L~~ ~~S~~ ~~D~~ ~~R~~ ~~G~~ ~~H~~ ~~I~~ ~~D~~ ~~U~~ ~~Q~~ ~~L~~ ~~Q~~ ~~J~~ 1DWLRQDO &RPPXQLFDWLRQ
FRQYHQWLRQ 1D ~~D~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ ~~D~~ ~~O~~ + ~~D~~ ~~U~~ ~~E~~ ~~R~~ ~~U~~ 0

3DS ~~DUQHO~~ & ~~H~~ ~~K~~ ~~D~~ ~~L~~ ~~R~~ ~~Q~~ ~~D~~ ~~O~~ ~~L~~ ~~W~~ \ DQG *HQQHU ~~H~~ ~~L~~ ~~Q~~ ~~G~~ & ~~R~~ ~~P~~ ~~P~~ ~~X~~ ~~Q~~ ~~L~~ ~~F~~ ~~D~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ ~~D~~ ~~O~~
6RXW ~~K~~ ~~W~~ ~~D~~ ~~W~~ ~~H~~ ~~V~~ &RPPXQLFDWLRQ \$VVRFLDWLRQ ~~DR~~ ~~Q~~ ~~Y~~ ~~D~~ ~~Q~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ ~~D~~ ~~O~~
86\$

8QGHUJUDGDWH 3RVWHU -XGJH)ORULGD &RPPXQLFDWL

, QYLWHG &ODVV /HFWXUHV

3'RLQJ &ULWLFDO &XOWXUD ~~O~~ ~~X~~ ~~R~~ ~~U~~ ~~W~~ ~~L~~ ~~R~~ ~~F~~ ~~W~~ ~~X~~ ~~D~~ ~~G~~ ~~H~~ ~~D~~ ~~R~~ ~~M~~ ~~H~~ ~~8~~ ~~F~~ ~~L~~ ~~K~~ ~~R~~ ~~R~~ ~~F~~ ~~D~~ ~~O~~
0HGLD 6WXGLHV 6 ~~V~~ ~~D~~ ~~O~~ ~~F~~ ~~X~~ ~~W~~ ~~H~~ ~~H~~ ~~8~~ ~~Q~~ ~~R~~ ~~Y~~ \$ ~~U~~ ~~W~~ ~~L~~ ~~W~~ ~~L~~ ~~Q~~ &RPPXQLFDW

37KH)XWXUH RI &ULWLFDO &XOWXUDO 6WX ~~H~~ ~~L~~ ~~M~~ ~~V~~ ~~W~~ ~~H~~ ~~W~~ ~~X~~ ~~U~~ ~~Q~~
/HFWX ~~8~~ ~~R~~ ~~P~~ ~~P~~ ~~X~~ ~~Q~~ ~~L~~ ~~F~~ ~~D~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ ~~D~~ ~~Q~~ ~~G~~ ~~8~~ ~~X~~ ~~O~~ ~~M~~ ~~X~~ ~~V~~ ~~L~~ ~~D~~ ~~O~~ ~~6~~ ~~R~~ ~~W~~ ~~X~~ ~~G~~ ~~X~~ ~~M~~ ~~K~~ ~~)~~ ~~O~~ ~~R~~ ~~U~~
'HSDUWPHQW RI &RPPXQLFDWLRQ 7DPSD)ORULGD 86

3'HVLJQLQJ 4XDOLWDWLY ~~3~~ ~~H~~ ~~B~~ ~~O~~ ~~X~~ ~~8~~ ~~M~~ ~~W~~ ~~L~~ ~~H~~ ~~F~~ ~~D~~ ~~O~~ ~~R~~ ~~E~~ ~~F~~ ~~E~~ ~~R~~ ~~H~~ ~~D~~ ~~U~~ ~~F~~ ~~K~~
&RPPXQL ~~B~~ ~~Q~~ ~~W~~ ~~L~~ ~~R~~ ~~Q~~ ~~D~~ ~~L~~ ~~P~~ ~~S~~ ~~D~~ ~~R~~ ~~O~~ ~~D~~ ~~V~~ ~~W~~ ~~H~~ ~~U~~ ~~R~~ ~~I~~ \$ ~~U~~ ~~W~~ ~~V~~ ~~L~~ ~~Q~~ 3URIHVVL
7DPSD)ORULGD @ ~~8~~ ~~6~~ ~~\$~~ E OF 9¼ òB6%4D p

3%H\RQG WKH 1XPEHUV 7KH 5HD ~~O~~ ~~L~~ ~~M~~ ~~L~~ ~~H~~ ~~V~~ ~~I~~ ~~R~~ ~~U~~ (~~F~~ ~~O~~ ~~R~~ ~~U~~ ~~L~~ ~~R~~ ~~D~~ ~~I~~ ~~F~~ ~~U~~ ~~H~~ ~~F~~ ~~E~~ ~~R~~ ~~H~~ ~~D~~ ~~U~~ ~~F~~ ~~K~~)
/HFWX ~~U~~ ~~H~~ ~~L~~ ~~Q~~ ~~J~~ (~~F~~ ~~R~~ ~~Q~~ ~~R~~ ~~P~~ ~~L~~ ~~F~~ ~~V~~ ~~Z~~ ~~L~~ ~~W~~ ~~K~~ ~~6~~ ~~R~~ ~~8~~ ~~Q~~ ~~D~~ ~~Y~~ ~~H~~ ~~D~~ ~~Q~~ ~~G~~ ~~W~~ ~~O~~ ~~R~~ ~~I~~)

³&ULWLFDO 0HGLD 6WXBEMQLLFD*WCHVBUFKFQWVHUFDR 8W XUDC
&RPPXQLF8QMLYHUVLW\ RI 7DPSD 'HSDUWPSIQW) @R &IRPP
86\$

³0HGLD DV 3XEOLXH3VHG DJRVMGUB I R6R8QLHYWVU VLW\ RI 7DPSD
'HSDUWPHQW RI &7DPSXQLRDMGLR Q86\$

³0HGLD \$QDO\VLV 0DV8FKHULQRZMOLVQ /H*20REBIBRJDWLRQ
7HFKQR8QUYHUVLW\ RI 6RXWK)ORU7DPS &R)ORHULG BI \$Q

³,QWHUVHFWLRQDOLW\ DQG ZQH5HDDZNRVQXRIMWHPIREWXSILF
(QJLQHHULQJ (FRQRPLFV ZLWK 6R8QDYHDQGWOREDBX,W
)ORULGD &ROOHJADRISDQJ)LORHULGIDQ J86\$

³0DVFXOLQLW\ DV 3HUIRUPD&CFDVMQ/HRVXCHGUBHGHV IRU
6RFLH8VLYHUVLW\ RI 7DPSD 'HSDUWPSIQW) @R &IRPP XQLF

³0RYLH 3RVWHUV ,FRQRJUAASRYKAQ G 9

9LUWXDO ([KLELWLRQ
:ROISDFN 6TXDG
5ROHDG (GLWRU
\$ZDUG RI 0HULW

2QH~~HHOKRU~~UW)LOP &RPSHWLWLRQ
9LUWXDO ([KLELWLRQ
:ROISDFN 6TXDG
5ROHDG (GLWRU
+RQRUDEOH 0HQWLRQ

*URX\$KLELWLRQXULHG
5HF\FOLQJ LV \$UW *DOD
+HQU\$%DQW 3DUORU7DSSD)
3HQHWUDWLRQ

7KBQLYHUVLWV R\$6\$P\$KLELWLRQ
7KBQLYHUVLWV R%07DPSD%R[7KHORWLBSS 7DPSD)
6ZLW]HUODQG
%LJ &UHHN

3URIHV6LHUQDGH
2UJDQL]HU DQ'3K'DFS\$QWFDWLRQ&R US\$FWLRS VP -XQW LFRFLD
'LYLV*LRQG XDWH 6WXGHQW &RPPLWWHH

9LFH &KDLU *UDGXDWH 6WXGHQW &RPPLWWHH \$FWLYLV
&RPPXQLFDWLRQ \$VVRFLDWLRQ

(GLWRULDOR\$VVDKXADQ3DQDO RI ,QWHUQDWLRQDO DQG ,QV
&RPPXQLFDWLRQ

ORGHUDWRU IRU \$O%MWZHHQHVKLHMLQH V &UHDWLQJ DQG
0HGLD ,GHORVQLWLRWHYHUVLHV LQ &RPPXQLFDWLRQ 7DPSD
&ROOHJH RI \$UWV DQG /HWWHUV DQGIHQRYHUWIDWQRQ
,QVW&WDXWHHQH *RUGRQ 7KHDWHU 7KH 8QLYHUVLV\ RI

0HPEHU &RQVWLWXWLRQDO &RQYHQWLRQ &RPPLWWHH)

8QLYHUVLV\ 6HUFLFH
3HHU 0HQWV R'DUR3K' 6WXSCHUQWPHQW RI &RPPXQLFDWLRQ 8
)ORULGD

6HVVLQR /HDGHU ZLWK*1%LYDQDQW 6QHHDWLRQW K&0HU\$
'HSDUWPHQW RI &RPPXQLFDWLRQ 8QLYHUVLV\ RI 6RXV

5HYLHZHU

-RXUQDOV

,QWHUQDWLRQDO -RXUQDO RI 3HUIRUPDQFH \$UWV DQG

&RQIHUHQFH 6XEPLVVLRQV

,QWHUQDWLRQDO &RPPXQLFDWLRQ \$VVRFLDWLRQ
3RSXODU 0HGLD &XOWXUH 'LYLVLRQ

/*%74 6WXGLHV ,QWHUHVW *URXS

*OREDO &RPPXQLFDWLRQ DQG 6RFLDO &KDQJH 'LYLV

1DWLRQDO &RPPXQLFDWLRQ \$VVRFLDWLRQ

\$FWLYLVP DQG 6RFLDO -XVWLFH 'LYLVLRQ

&ULWLFDO DQG &XOWXUDO 6WXGLHV 'LYLVLRQ

&DXFXV RQ /*%74 &RQFHUQV

*/%74 &RPPXQLFDWLRQ 6WXGLHV 'LYLVLRQ

6WXGHQWLWLRQ

6RXWKHUQ 6WDWH \$VVRFLDWLRQ

,GHQWLW\ ,QFOXVLRQ DQG 6RFLDO -XVWLFH 'LYLVLRQ

*HQGHU 6WXGLHV 'LYLVLRQ

\$VVRFLDWLRQ IRU (GXFDWLRQ LQ -RXUQDOLVP DQG 0D

&RPLVVLRQ RQ *UBGXDWH (GXFDWLRQ

0HPEHUVKLSV

,QWHUQDWLRQDO &RPPXQLFDWLRQ \$VVRFLDWLRQ

1DWLRQDO &RPPXQLFDWLRQ \$VVRFLDWLRQ

6RXWKHUQ 6WDWH &RPPXQLFDWLRQ \$VVRFLDWLRQ

6RFLHW\ RI &LQHPD DQG 0HGLD 6WXGLHV

\$PHULFDQ 6WXGLHV \$VVRFLDWLRQ

6XUYHLOODQFH 6WXGLHV 1HWZRU